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### **The Polish Economy in the Year 2000**

**Need and Outlook for Systemic Reforms, Recovery and Growth Strategy**

**Zbigniew M. Fallenbuchl**

**with a commentary  
by Paul Marer**

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**University of Pittsburgh Center for  
Russian and East European Studies**

**ZBIGNIEW M. FALLENBUCHL** is Professor of Economics and Dean of Social Science at the University of Windsor, Windsor, Ontario, Canada. Currently he also serves as editor of *East European Economics - A Journal of Translations* and as a member of the Editorial Board of *Comparative Economic Studies*.

**PAUL MARER** is Professor of International Business at Indiana University's School of Business. His publications include *Soviet and East European Foreign Trade* and *Dollar GNPs of the USSR and East Europe*. Professor Marer is currently co-directing a major study on reforms in centrally-planned economies.

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## I

The prospects for economic development in Poland for the rest of this century depend on the ability of the authorities to handle a number of very serious obstacles that presently face the economy. If the constraints imposed by these obstacles are significantly reduced during the second half of the 1980s, a considerable improvement may take place during the 1990s. If, however, the authorities choose to follow present economic policies without modification, prolonged stagnation will likely continue. The final outcome will, of course, also depend on a number of external factors beyond the authorities' control, such as the state of the political and economic situation in the world and within the Warsaw Pact Bloc, East-West political and economic relations or the occurrence of some unforeseen natural or man-made ecological disaster. Assuming, however, no big changes in exogenous factors, the economic situation in Poland in the year 2000 will primarily be determined by the authorities' policies within the next few years.

## II

The Polish economy has not yet recovered from the dramatic decreases in production that occurred between 1979 and 1982, which reduced Net Material Product (NMP), or "Produced National Income," by one quarter.<sup>1</sup> After such a deep decline, relatively high rates of growth could have been expected as the result of increased utilization of existing productive capacities. The recovery process has, however, been sluggish. Rates of growth of NMP were 6.0 percent in 1983, 5.6 percent in 1984, 3.4 percent in 1985 and 5.0 percent in 1986. In that year the NMP was still about 7.0 percent below the 1978 level, and the Utilized NMP 12 percent below that level (see Table 1). On a per capita basis these figures were 14 percent and 19 percent below the 1978 level.

Exports to the West have not increased sufficiently to ensure enough hard currency to service the foreign debt and to pay for necessary imports

without which the economy has been unable to accelerate its growth. In 1986 exports to the second payments region (hard currency) were still 2.5 percent below the 1978 level and imports from those countries 40.0 percent below that level. Although during the first ten months of 1987 hard currency exports increased by 5.1 percent and imports increased by 4.8 percent, exports declined in September and October and imports in October (see Table 2). An insufficient supply of raw materials, components and spare parts has adversely affected the rate of growth of national income, while the inability to make interest payments and rescheduling of loans have increased the hard currency debt from \$25.5 billion in 1980 to \$26.8 billion in 1984, \$29.3 billion in 1985 and \$33.5 billion at the end of 1986. In 1986 only \$1,958 million was allocated to service the debt, as compared with \$2,588 million in 1985.<sup>2</sup>

Inflation has not been eliminated. Despite administrative fixing of a large share of prices and large subsidies paid to maintain these prices below costs, the prices of goods and services have increased, according to the official index, by 361.2 percent between 1978 and 1985. For 1986 the authorities planned an increase in prices of 13 percent. The actual increase was 18 percent. The plan for 1987 envisaged an increase of 12-13 percent. During the first ten months of the year prices increased by 26 percent. Nominal incomes of the population increased by 386.1 percent between 1978 and 1985. The plan for 1986 envisaged an increase of 12.8 percent. The actual increase was 20.3 percent. The plan for 1987 expected an increase of 18.8 percent. The actual increase during the first ten months was 26.3 percent (see Table 3).

The author has argued elsewhere<sup>3</sup> that, although the difficulties were indeed enormous at the beginning of the 1980s, to a considerable extent government policies have contributed to the slowness and weakness of the recovery. After the third forced change in leadership in the history of the People's Republic of Poland, the new leaders continued to follow basically the same policy as that which had triggered the reduction in production at the end of the 1970s and was the proximate cause of the crisis. By using

highly centralized administrative commands they continued to cut imports from the West in a more or less arbitrary way. Using the same methods, they attempted to shift resources from the production of investment goods to the production of consumption goods and for export. In this way they further destabilized the economy by breaking cooperation linkages among the enterprises. There were delays in the formulation of a recovery program which was not very impressive and in starting discussions with Western creditors and negotiations for readmission to the IMF and the World Bank.

Above all, the envisaged economic reform, which was officially introduced in 1982, has not been implemented to a significant extent. As the result of the partial introduction of various, not fully consistent modifications, a "manipulative system" has emerged in which the central authorities try to manipulate the decisions of formally autonomous enterprises by a combination of financial and direct administrative measures, while the enterprises try to manipulate the decisions of central authorities by bargaining for various exemptions, more favorable treatment, subsidies and priority allocations of scarce resources, including foreign exchange.<sup>4</sup> This system has not been able to improve economic efficiency and does not differ, in this respect, from the old highly centralized command system, the operation of which was one of the long-run causes of socio-economic crises in Poland.<sup>5</sup>

Although the aggregate production targets of the Three-Year Plan for 1983-85 were slightly exceeded, there was no needed structural change, no improvement in efficiency, and external and domestic disequilibria<sup>6</sup> were not eliminated or even significantly reduced. The ground was not, therefore, prepared for the Five-Year Plan for 1986-90. Its preparation was delayed after it had met with severe criticism from various consultative bodies and the *Sejm* (Parliament).<sup>7</sup> It was finally approved on December 18, 1986.

Economic growth during the new five-year period, and the creation of conditions for development during the next decade, will depend on the

objective constraints, their subjective evaluation by the planners and the proposed policies, including systemic modifications and the adopted strategy of development. In the Plan for 1986-90 the planners took into consideration the following constraints:

- (1) the unsatisfactory demographic situation and shortage of labor;
- (2) a very limited supply of raw materials;
- (3) the unsatisfactory state of the capital stock, a large part of which had become obsolete and should have already been replaced;
- (4) the large volume of unfinished investments which were started during the 1970s and had been selected for continuation;
- (5) shortages of water;
- (6) rapidly deteriorating ecological conditions;
- (7) external constraints

These problem areas have been recognized by the planners. It may be useful to examine them, taking whenever possible a longer time horizon than the plan period.

### III

The demographic situation in 1986-90 is regarded by the planners as unfavorable. Total population is expected to increase during this period by 1.2 million. However, out of this total 902,000 will be persons below and above working age and only 326,000 those at working age (see Table 3). It will be necessary to provide an additional 500,000 places in elementary schools and an additional 350,000 places in secondary schools, to enlarge hospital and social services to take care of an increase of 513,000 in the population of the elderly. Taking into consideration present shortages of school, hospital and social service facilities, shortages of construction materials and the very unsatisfactory performance of construction services, this is a considerable burden for the economy.

The planners seem, however, to be even more concerned about a limited increase in the size of the working age population. Since the beginning of the 1980s the apparent shortage of labor has been regarded

as a serious barrier to growth. The increase in the size of the working age population was already smaller in 1981-85 than in the previous five-year periods. At the time when there were fears that the economic crisis and the implementation of the reform might lead to unemployment, the authorities encouraged early retirement and generous child-care leaves for mothers. The mechanism of the reform has not, however, encouraged a more rational use of labor.<sup>9</sup>

Hoarding of unnecessary workers is still a good policy from the enterprises' point of view. It does not cost much, especially with the cost-plus formula of price formation, and provides insurance against future shortages or unforeseen increases in requirements. As it is sometimes stressed in the Polish economic press, "so far, there is nothing either in the mechanism of the economic reform nor in the way in which the labor market operates nor in the economic system of the enterprises which could induce an overall rationalization of employment" but, on the contrary, "some systemic solutions that have been introduced contribute to the increase in the shortage of labor..."<sup>10</sup> The number of vacancies largely exceeds the number of persons looking for a job despite a decline in production in comparison with the 1978 level and a low level of utilization of productive capacities which often does not exceed 60 percent. The rationalization of employment would, however, require granting real autonomy to the enterprises in the determination of wages and employment and the operation of market forces.<sup>11</sup>

The authors of the Five-Year Plan still think mainly in terms of an extensive pattern of development and are very concerned about increases in the quantity of labor, although they also accept the need for increases in productivity for the achievement of the planned rate of growth.<sup>12</sup> They intend to encourage later retirements and even the return of some retirees to employment, and to stimulate increases in the participation of women, which is already very high. Even using these measures they expect that the supply of labor will increase in 1986-90 by only about 500,000, or by 3 per-

cent, while it increased by 1.6 million in 1971-75 and 1.2 million in 1976-80.<sup>13</sup>

It has been pointed out in the Polish economic literature that the way in which the planners treat the decrease in the rate of growth of supply of labor in 1986-90 can be given as an example of "traditional technocratic approach." The acceptance of a deficit of labor as one of the barriers to growth "proves that either the enormously excessive employment in administration, in agriculture and in many branches of industry are not noticed or the attempts to rationalize employment have been given up" in order to avoid some "not always popular but necessary decisions."<sup>14</sup> In the absence of such decisions, which must include a sufficiently far-reaching, bold systemic reform, the "employment barrier" will tend to adversely affect the rate of growth during the second half of the 1980s, but its importance should decline in the first half and, even more so, during the second half of the 1990s.

#### IV

The planners point out that one of the characteristic features of the five-year period 1986-90 will be a very limited supply of fuels, raw materials and intermediate goods.

Increases in domestic production will be limited as the result of a drastic reduction in investment, which has lasted for a long period of time, and rapidly increasing costs of production in the existing mines and plants, deteriorating geological conditions of exploitation, breakdowns of fully depreciated machinery and equipment and some serious ecological problems. Various investment projects that are at present under construction in this field are expected to increase the overall supply by about 10 percent in 1990 in comparison with 1985. However, this aggregate hides considerable differences in the expected increases for individual materials (see Table 5). For example, in the case of fuels, these increases for the five-year period range from 0.4 percent for gasoline and 1.8 percent for hard coal to 39.8 percent for brown coal (lignite).

The supply of imported fuels and raw materials will be even more limited. From the first payment region (mainly non-hard currency transactions with CMEA countries), on which Poland depends very heavily for the supply of some essential fuels and raw materials, some increases in imports of natural gas and electricity are expected. However, "it is impossible to expect any increase in imports of oil and cotton."<sup>15</sup> Imports from the second payment region (hard currency transactions) will be drastically limited by Poland's balance of payments position, including the necessity to service the foreign debt. If poor weather were to occur during the period, adversely affecting agricultural production, it might be necessary to increase imports of grain and feeds. This would further reduce hard currencies available for the import of fuels, raw materials and intermediate goods for industrial production.

Taken together, the supply of fuels and basic materials from domestic production and from imports cannot be expected to increase by more than 9 percent.<sup>16</sup> To a very great extent the situation will depend on the performance of the export sector, especially on the ability to expand exports to non-socialist countries and here prospects are not good, judging by the experience of the last two years (see Table 2). Any expansion of exports depends, however, on the availability of imported materials, components, spare parts and even some new machines. It is clearly a vicious circle.

This is a very sensitive area. The industrialization drive of the 1950s and 1960s created a highly fuel and material-intensive industrial structure. Gierek's "new development strategy" of the early 1970s, instead of reducing this intensity, increased it further and the dependence on imported raw materials, components and parts became relatively high. The centralized command system was unable to enforce a more economical use of inputs. When drastic cuts in imports started to be affected in order to cope with the growing balance-of-payments disequilibrium and rapidly mounting foreign debt in the second half of the 1970s, the impact of this policy on the level of industrial production was very strong.<sup>17</sup> This impact was somewhat reduced by a shift in the structure of imports, by a greater

decline in the import of investment and consumption goods than that of fuels, raw materials and intermediate goods for industrial production and by some import substitution which led to a deterioration in the quality of products and increased costs of their production.<sup>18</sup> With the decline in output, import intensity has declined: there was not only a reduction in imports associated with decreases in national product, but also a downward shift in the propensity to import. It is likely that the further growth of output will, however, again increase import intensity. There will appear not only increases in imports induced by increases in national product but also an upward shift in the propensity to import as the result of structural changes associated with the growth of national product.

The Plan for 1986-90 was prepared in three variants. Each of them depends on a different assumption as to the possible reduction in the use of fuels, raw materials, and intermediate goods per unit of output. Variant I envisages a 3 percent average annual rate of growth of NMP during the five-year period. It would be achieved if material intensity could be reduced by 6.1 percent over the period. In Variant II the 3.5 percent average rate of growth of NDMP would require a decline in material intensity of 8.6 percent. In Variant III the achievement of a 4 percent growth rate of NDMP would require a reduction in material intensity of 10.3 percent. This is the cornerstone of the plan and, as the planners stress, "an even greater reduction in the use of raw materials and intermediate goods can secure higher rates of growth of national income — in an opposite situation: less satisfactory results in the economizing of materials would reduce the rate of growth and, therefore, would make the achievement of the goals of the plan impossible."<sup>19</sup>

The planners expect to achieve the reduction in fuel and material intensity by structural changes, introduction of new technologies and by various administrative and financial measures which should eliminate waste. However, because the ability of the economy to invest, to expand domestic research and development, to import machines and equipment and to purchase foreign licenses is very limited, the main stress will have

to be put on economizing fuel and materials. A government program of fuel and material saving was formulated in 1983<sup>20</sup> but has had limited results. It eliminated the most obvious wasteful practices but not much more can be expected from similar actions in the future.<sup>21</sup> With low prices of such important commodities as coal,<sup>22</sup> big subsidies, the cost plus formula for the determination of a large proportion of all prices, a generous approach to the acceptance of the so-called "necessary costs" by the authorities and no effective economic pressure, controls and administrative pressures will probably be ineffective. A significant reduction in fuel and material intensity requires strong financial incentives which only a far-reaching economic reform could provide. The reform has not, however, been implemented to a sufficient extent to provide such incentives. This point is stressed by the Consultative Economic Council:

Profit, which was supposed to be the main incentive to increase efficiency in the enterprises is not performing this function and has been losing its importance because of the increasing size of various financial burdens that are imposed on the enterprises. Increases in the rate of financial deductions from profits had to be compensated in some cases by granting individual exemptions. To obtain such exemptions became often an easier way to improve the financial situation of the enterprise than concern about costs.

The price policy has also been playing an adverse role. It prevents the enterprises from adjusting the product mix to the requirements of the market and to establishing more rational proportions in the output of various goods. The experience of the previous National Socio-Economic Plan (i.e. the Three-Year Plan for 1983-85) has demonstrated the ineffectiveness of all those specific incentives which were supposed to replace profit in inducing greater economy in the use of materials and, particularly, fuels and energy.<sup>23</sup>

However, the search for some specific measures substituting for profit and the market mechanism continues, as has been shown in a recent debate on the budget proposal for 1987 in the *Sejm*.<sup>24</sup> At the same time, instead of moving ahead with the implementation of the "second phase of

the reform," which was promised at the 1986 Tenth Party Congress, the government has proposed to the *Sejm* eleven modifications of the reform legislation which were assessed by many Polish economists as clearly regressive.<sup>25</sup> Subsequently, after a prolonged discussion, a somewhat vague and internally inconsistent program of the second phase of reform was published, but not much action has followed.

## V

The next two items on the list of constraints that have been identified by the planners in the preparation of the Plan for 1986-90 are the condition of capital stock in the economy and the decision to continue investment projects that had been started during the investment drive of the 1970s. They should be discussed together as they are closely related.

The condition of capital stock deteriorated dramatically during the first half of the 1980s. The "directors of the system" chose to allocate a large proportion of very limited funds for the continuation of unfinished investment projects. They were unable to make the decision to cut losses in a determined way and tried to continue as many of the projects as possible, extending the length of construction and attempting to introduce some economy by using cheaper materials. Many of these investment projects are highly fuel and capital intensive and represent technologies that have become obsolete and will be even more so at the end of the extended gestation period. Moreover, a large part of them are in mining, metallurgy and heavy industry, the sectors that enjoyed priority under the development strategy that was followed in the 1970s. Their usefulness is now questioned, taking into consideration the officially stated new priorities.<sup>26</sup>

Some indication as to the extent of unfinished investments is provided by Table 6 which presents available official statistics. In 1982, which was the worst year in this respect, total outlays that were necessary for the completion of unfinished investments represented 71.2 percent of NMP in that year. Outlays that had already been spent on unfinished investments

represented only one-third of the outlays that still had to be made. Outlays that were effected in that year were equal to 19.7 percent and the value of completed projects during the year was equal to 11.4 percent of the outlays necessary for the completion of unfinished investments. The situation improved in the subsequent three years, although there was a slight regress in 1985. The value of outlays that were necessary for the completion of unfinished investments increased at current prices from one year to another. Their proportion to NMP declined to 51.3 percent in 1984 but increased to 54.4 percent in 1985. Outlays that had already been made were equal to 47.1 percent of the outlays that still had to be made in 1984 and 45.7 percent in 1985. The value of investment outlays effected in these two years was equal to 29.6 percent and 29.1 percent and the value of completed investments to 20.2 percent and 20.3 percent of the outlays necessary for the completion of unfinished investments.

In 1981 the authorities stopped 1,273 investment tasks with a total value of 324 billion *zloty* that represented 26.6 percent of total outlays which were needed to complete unfinished investments. In 1982 a small number of projects were added with a value of 36 billion *zloty*. However, already in 1983 some of the stopped investments were started again. The value of stopped investment projects at the end of that year represented only 14.5 percent of the outlays that had to be made to complete all unfinished investments. This proportion declined to 12.2 percent in 1984 and 7.9 percent in 1985 (see Table 6).

In order to secure as many funds as possible for the continuation of unfinished investments, the planners were prepared to run down the existing machinery and equipment until they could not be repaired any more.<sup>27</sup> It has been calculated that, on average, machines that operate in the national economy have already reached 59 percent of their service lives. In some sectors this proportion is much higher. For example, in the synthetic materials industry it is 77 percent, in the optical industry 72 percent, in the industry producing metal-working machines 71 percent and in the industry producing machines and equipment for light industry 70 percent. These

are fields which are now supposed to be given priority. About 23 percent of all machines and equipment in the national economy should already have been replaced, including 30 percent in the socialist industry and 15 percent of transport equipment.<sup>28</sup>

These figures refer to the physical life of capital assets. They do not take into consideration obsolescence. A very large part of machines and equipment should have been replaced because, although they still work, they are inefficient, waste fuel and materials, require too many operators or produce low quality products. The number of work stoppages caused by breakdowns and frequent repairs is increasing.<sup>29</sup> Moreover, even equipment that was recently installed frequently does not represent the most modern technology and there are no prospects for an improvement in this respect in the near future. In 1981-85 Poland purchased only one foreign license and, at the same time, there was a drastic decline in innovation within the economy.<sup>30</sup> From the extensive development point of view the concept of "absolute decapitalization" is sufficient. This is a situation when, because machinery and equipment are not replaced, the production capacity of a plant or an industry, calculated in natural units or as gross production in constant prices, declines. However, in order to introduce an intensive pattern of development it is necessary to consider the so-called "relative decapitalization," or a situation in which the non-replacement of machines and equipment does not reduce output, but results in an increase in the costs of exploitation and reduces, therefore, net production in constant prices. At present, in order to stop this second type of decapitalization, it would be necessary to allocate 60-80 percent of the whole available supply of machines per year.<sup>31</sup>

The decision to continue unfinished investments and to start some new projects has reduced the proportion of investment outlays allocated for replacement and modernization from 43 percent of all investments in the socialist sector of the economy in 1980 to 25 percent in 1984 and 22.5 percent in 1985.<sup>32</sup> It has also reduced the possibility of effecting structural changes within the economy which have been recognized as necessary in

order to expand production for export and for the domestic market of consumption goods and to reduce the fuel and material intensity of the economy.<sup>33</sup>

Economic growth in 1986-90 will, therefore, be limited not only by a relative but also by absolute decapitalization in many sectors of the economy and inability to allocate sufficient funds for replacement of the depreciated capital stock, for its modernization and for the restructuring of the economy. There is also a limitation on growth imposed by another policy decision. Even before submitting the proposal for the Plan for 1986-90 the planners asked the *Sejm* to approve a long-run program for the development of the fuel and energy complex. Approval was given without much attention being devoted to the consequences of this decision for capital replacement, modernization and restructuring. As has been pointed out by specialists, the cost of extracting one ton of fuel under the present geological and technical conditions is 20,900 *zloty*, while the installation of devices that would save one ton of fuel is only 8,900 *zloty*, or 42.6 percent of the cost of production.<sup>34</sup>

In the Plan for 1986-90 investment is expected to increase by 23.8 percent in comparison with 1981-85, investment outlays allocated to industry by 59 percent and investment allocated to the fuel and energy complex by 67 percent. Together the fuel and energy, metallurgical and mineral industries will obtain 49 percent of all industrial investment, as compared with the already very high share of 47 percent in the previous five-year period. This is a very highly capital-intensive sector of the economy with a long gestation period of investment. As a result, as has been pointed out in the debate on the Five-Year Plan in the *Sejm*, "until at least the end of the present decade investment will not be able to ensure those structural changes which would permit eliminating disequilibrium by an increase in supply." Moreover, "the implementation of this strategy will petrify the structural backwardness of the economy and makes the objective of starting the repayments of the hard currency debt during the following five-year period not very realistic."<sup>35</sup>

The selection of this strategy also has another consequence. Investment outlays will be concentrated on continued and new investment projects in traditional sectors of the economy and investments which will continue to be centrally planned. Only limited funds will be left within the enterprises for replacement, modernization and restructuring of their production. This will limit their autonomy, initiative and flexibility. The adoption of this strategy will, therefore, limit the possibility of a further implementation of the reform.

An alternative strategy would be to limit drastically outlays on the continuation of unfinished investment and on new investments in the capital-intensive fuel, energy, metallurgical and mineral industries in favor of outlays for the replacement and modernization of the capital stock and on reductions in fuel and material intensity. These projects are usually less capital-intensive. They have a shorter gestation period and the results would, therefore, appear within a shorter period, thus reducing disequilibrium. This strategy would require leaving sufficient funds within the enterprises and the introduction of an economic pressure on them in the form of market forces. This would force them to reduce costs through more efficient use of fuels and energy and by the selection of a more rational product mix.<sup>36</sup> This would also make them more flexible and more able to compete in the export markets.

Taking into consideration that the Plan for 1986-90 requires that about two-thirds of economic growth must come from improved productivity, the selection of the first strategy does not seem to be consistent with the objectives of the plan.

## VI

Constraints in the form of a growing shortage of water and rapidly progressing deterioration of the ecological situation can also be discussed jointly.

The shortage of water represented 12.5 percent of total requirements in 1985 and it is expected to increase to 16 percent in 1990. It will have

an adverse effect on the rate of economic growth not only in agriculture but also in industry. Although natural conditions are not favorable, the shortage is mainly caused by the use of water-intensive technologies, a small proportion of closed circuits in industrial plants, losses in transportation and insufficient storage facilities. There are also wasteful habits and no incentives to economize. The price of water is very low and the system of penalties for polluting ineffective.<sup>37</sup> The shortage of water is, therefore, aggravated by a high degree of pollution of rivers and lakes. The proportion of excessively polluted waters in the so-called "controlled rivers" increased from 26.4 percent in 1971-73 to 33.0 percent in 1974-77 and 39.6 percent in 1974-77.<sup>38</sup> Drainage of industrial waste to rivers, inadequate sewers and insufficient sewage treatment facilities are major problems.

Air pollution has been increasing rapidly. There are 27 regions, with 35 percent of the total population, which have been classified as having a dangerously high degree of pollution. The accepted safety standards are exceeded in all but 20 percent of the country's area.<sup>39</sup>

The poor supply of water and a dangerous state of water and air pollution are the results of a prolonged period of neglect during the industrialization drive and rapid urbanization. Investment outlays have always been insufficient in this field and they were especially low during the early 1980s. The power of industrial ministries has always been greater than that of the ministry of health and local authorities and concern about production has had precedence over concern about health.

At present some outlays simply must be allocated to this field. They reduce the availability of funds for other purposes but without them the situation could assume truly catastrophic dimensions. This is, therefore, a real barrier to growth. Its existence imposes an even greater need for the very economical use of investment resources in other fields. It is another reason why priority should be given to relatively low-capital intensive projects with quick results and, above all, in the forms of increased efficiency and reduced waste of resources, including water.

According to the new Five-Year Plan, outlays on the protection of the environment are to be increased by 67 percent between 1985 and 1990. The overall amount will be two and one half times greater than the level spent in 1981-85. About 60 percent of all funds will be allocated for the protection of waters. There will be no visible overall improvement at the end of the plan period, but further deterioration of the situation should be stopped.<sup>40</sup> If this part of the Five-Year Plan is not implemented, the solution of this urgent problem would be shifted to the next decade and would adversely affect economic growth then.

## VII

The authors of the Five-Year Plan for 1986-90 accepted that the possibility of obtaining the necessary imports from abroad is at present considerably less favorable than in 1980 and expect that external constraints will continue to be serious during the whole period.<sup>41</sup> The plan has been built on the assumption that the capitalist countries will continue to use international trade and economic cooperation to exert political pressure and that the embargo on the export of Western modern technology to the Warsaw Pact countries will not be lifted. Moreover, the planners accepted that exports to the West would be limited by protectionism on the demand side and by inadequate quality and quantity of exportables on the supply side. They should have also added a growing competition by the New Industrial Countries (NICs) and even some Less Developed Countries (LDCs) who are increasing their share of the advanced countries' market for many commodities which either have been traditional or are potential exports of East European countries.<sup>42</sup>

The planners look to an accelerated integration within the CMEA as the best chance for the expansion of Polish foreign trade although they recognize that the expansion of exports in this direction will also necessitate offering high quality, modern and technologically sophisticated products.<sup>43</sup>

The situation is further complicated by the size of the indebtedness which was \$33.5 billion and 6.5 billion transferable rubles at the end of 1986.<sup>44</sup> A large part of the revenue from exports to non-socialist countries will have to be used to service the debt, further reducing the volume of available imports, while it has been agreed that trade with the CMEA countries will be balanced over the five-year period.<sup>45</sup>

External constraints are the most important among all those identified by the authors of the 1986-90 Plan, although they do not seem to recognize them as such. The planners, political leaders and many economists in Poland<sup>46</sup> have not yet accepted that, because of the achieved level of development and a heavy foreign indebtedness, the Polish economy has become an open economy in the sense that economic growth will depend to a very great extent on the ability of the economy to obtain a sufficient rate of imports and an even greater rate of exports.

Already during the second half of the 1960s Poland, together with other East European countries, had reached such a level of development that the continuation of expansion required effecting a switch from the extensive to an intensive pattern of development. Already then it became necessary to accept that foreign trade must serve as an engine of growth; that it is needed to effect modernization of production, to improve industrial structure and to ensure higher quality of products, lower unit costs and improved efficiency; that an intensive pattern of development is, therefore, impossible without international specialization and cooperation.<sup>47</sup> Now, with a heavy indebtedness, the role of export has become decisive.<sup>48</sup> This should have been accepted as the starting point for the construction of the Five-Year Plan for 1986-90 and the area of the greatest effort for economic policy.

Although lip service is often paid to the importance of exports and the necessity of effecting a pro-export restructuring of the economy, the targets of the Five-Year Plan do not reveal that this strategy has really been accepted.<sup>49</sup> Exports are expected to grow by 3.5 percent and imports by 2.6 percent per year. This is not sufficient to ensure servicing the debt. It

is inconsistent with the assumed rate of growth of national income and, at the same time, unrealistically high in the present situation with a far-reaching reform, restructuring of the economy and an overall increase in efficiency.

With the assumed annual rates of growth of export and import, a positive balance of trade with non-socialist countries will be only \$1.5 billion in 1990, which represents at most about half of the interest payments which will be due in that year. The debt would, therefore, increase to about \$42 billion.<sup>50</sup> The Plan assumes that imports will increase at a 0.75 to 1.00 ratio in comparison with the increase in exports. In 1983-85 the ratio was 1.0 to 1.0 and this was at a time when the economy still operated considerably below the 1978 level.<sup>51</sup> A determined effort to reduce fuel and material intensity of production may keep the rate of growth of imports low but only if reform would create a strong mechanism that could enforce such a reduction. Moreover, an expansion of exports to the West would probably be import-intensive as it would require many specific materials, components, spare parts and new machines to ensure the required standards. It has been suggested that the income elasticity of import may not be lower in 1986-90 than 1.4 to 1.5 and that, therefore, in order to ensure a 3 percent rate of growth of national income, imports should grow by 4.2 to 4.5 percent per year. To take into consideration the need to service the debt and to balance trade with the CMEA countries would require a rate of growth of exports of about 6 percent.<sup>52</sup>

There is, however, nothing in the Plan that would make even the accepted rate of export of 3.2 percent realistic. The continuation of the export passive adjustments in the exchange rate of *zloty* to domestic inflation, unrealistic prices, weak financial incentives and the lack of significant systemic modifications, insufficient investment outlays for modernization or even for replacement of used-up capital, and for a pro-export restructuring of the economy cannot but suggest that the results during the plan period may not be much better than in 1985 and 1986 when the performance of export to the West was truly disastrous.<sup>53</sup> Almost the whole in-

crease in export will have to come from the expansion in the export of manufactured goods, as the export of fuels, raw materials and food and agricultural products is not likely to increase. For example, the Plan assumes that with the decline in the total export of hard coal by 8.3 percent, or 3 million tons, the export of this commodity to the first payments region will increase by 1.5 percent, while its export to the second payments region (non-socialist countries) will decline by 13.8 percent.<sup>54</sup>

In December 1986 the government announced a set of measures which were going to be applied, starting in 1987, in order to stimulate foreign trade. They include:

(1) a more active rate of exchange policy to raise the degree of profitability of export operations;

(2) a more general use of the "transaction" prices, or the actual prices in foreign currencies which are obtained for exports or paid for imports, converted at the current rate of exchange into *zloty* (to be applied only in the case of hard currency transactions);

(3) guaranteed priorities in the supply of materials for production for export and for investment projects classified as export generating;

(4) additional deductions from income tax and from the tax on additional employment to encourage exports;

(5) an improvement in the system of hard currency retention ratios, or a certain proportion of export earnings that the exporters could use to finance their import needs. Unlike in the past the funds will be owned by the exporters, who will be able to decide how to use them without asking for permission; the retention funds which, contrary to previous assurances, were blocked by the bank will now be partly released;

(6) the principle of the determination of the size of the retention rates on individual basis to differ from one exporter to another has been left unchanged, but all the retention ratios in existence will be reduced by 20 percent;

(7) those foreign exchange retention funds that will not be now released will be converted into certificates which the owners will be able

to exchange into foreign currencies within the next few years at the current rate of exchange and use in the same way as currently earned retentions;

(8) the owners of foreign exchange retention funds would be able to trade foreign exchange among themselves, under the bank's control, at the current rate of exchange;

(9) in special cases the exporters will be allowed to purchase for foreign exchange some final products which would otherwise be exported; the purpose is to avoid the cases where the exporters had to import from abroad some components which were previously exported from Poland; a special permission from the Ministry of Foreign Trade will, however, be necessary to effect these purchases.<sup>55</sup>

There is nothing new in this list of measures. They were all included in the original program of the reform but have not been used effectively. A devaluation can only induce an increase in export when the financial system of the enterprise is such that the enterprise would find it really profitable to export, that the profit is accepted as the success indicates and its maximization would increase financial benefit for the enterprise. Moreover, the enterprise must be free to decide what it will export and to which market and must be able to purchase freely at meaningful prices all its imports. In the absence of these conditions changes in the rate of exchange of *zloty* will not have much effect on exports.

The extent to which the transaction prices are used has declined since the introduction of the reform. So long as a very large proportion of all prices are centrally fixed and revisions take place from time to time in major, administratively effected price revisions, these will not be true transaction prices and their usefulness will be limited.

The retention ratios were introduced and proved to be very effective. Subsequently they were blocked by the bank. Will the enterprises be willing to take their reintroduction seriously? Moreover, they will be 20 percent smaller. Would they be sufficiently big for the enterprises to bother? Especially, if when in need they would be able to obtain foreign exchange

by central allocation depending on their ability to convince the authorities about the importance of imports that they have to make and when they enjoy a priority position because of involvement in the so-called "operational programs" or "obligatory sales to the government." Some use of the retention funds will still be subject to control by the bank (point 8) or the Ministry of Foreign Trade (point 9). In addition, the retention rates would continue to be individually determined. This is a typical feature of the "manipulative system" that now operates in Poland. It leaves room for arbitrary decisions and the same applies to all sort of "guaranteed priorities" in the supply of materials which, apparently, will continue to be administratively allocated.

These measures will not be able to create sufficient flexibility for the exporters to respond to changes in foreign demand and, most likely, will not create sufficient incentives. It is doubtful that there will be a significant improvement in the elimination of the "foreign trade barrier".

## VIII

The above list does not include all constraints. There are serious limitations on agricultural production and its high sensitivity to unfavorable climatic conditions resulting from long neglect of this sector of the economy, past discrimination against the private sector, technological backwardness of production and the lack of modern infrastructure. Very high losses of produce are caused by shortages of fuel, water, construction materials, spare parts for machines and equipment, pesticides and other chemicals, by inadequate warehousing and transportation facilities and by insufficient productive capacities in food and other agricultural produce processing industries.<sup>56</sup>

There is an adverse impact of severe cuts in the import of foreign machines and licenses, books and international contacts since 1982, as well as of drastic cuts in outlays on research and development.<sup>57</sup>

There is a very high level of inflation and a very deep internal disequilibrium which require systemic modifications and price revisions. There is

a painful decline in the standard of living that cannot be measured by statistical real wages, i.e. nominal incomes divided by changes in the official price index, when there is a black market, additional expenditures of money and time are needed to secure some goods and forced savings of the population are growing because there are no goods and services on which personal incomes could be spent. There is an unsatisfactory system of distribution without any sign of improvement.<sup>58</sup> There is a shortage of housing which has no chance to be eliminated before the year 2000.<sup>59</sup>

All this reduces incentives to work and creates psychological attitudes that are not conducive to the acceptance of new austerities or commitments. In this situation, as the then Chairman of the Planning Commission stressed in 1986, the government must take into consideration the willingness of the society to accept its policies.<sup>60</sup> The negative answers given to the referendum of November 29, 1987, clearly demonstrated the lack of confidence in the government's ability to implement the reform and to improve the economic situation.<sup>61</sup>

However, even taking into consideration only those constraints that have been identified by the planners, it appears that neither the system nor the adopted strategy guarantee that the present Five-Year Plan will be able to cope successfully with the socio-economic crisis and to prepare a sound basis for successful development during the 1990s. The introduction of the Second Phase of Economic Reform is unlikely to improve the economy's chances to a sufficient extent.<sup>62</sup>

The economic situation in Poland is not hopeless. There are many reserves and possibilities. Despite the many serious constraints it should be possible to end the crisis and to solve the problem of its heavy indebtedness.<sup>63</sup>

So far the government has not, however, been able to improve the situation to a significant extent. In order to do so, the government would have, above all, to accept that the key problem is how to effectively handle the debt so that the "foreign trade barrier" could be eliminated and the economy could have the necessary supply of raw materials, components

and machines without which growth is impossible. It seems that this would require a parallel action on two fronts: (1) the full implementation of systemic reform and the adoption of a development strategy that would increase the overall efficiency and flexibility of the economy, especially of the export sector, and result in a major restructuring of the economy; and (2) the negotiation to obtain a package deal with the creditors, the IMF and the World Bank that would result not only in a more realistic rescheduling of repayments over a considerably longer period of time but also in the foreign participation in the restructuring of the economy and in the expansion of hard currency earning exports with the help of new credits, industrial cooperation and equity participation by Western firms.<sup>64</sup> A necessary condition for this action on both fronts is a further improvement in the domestic political atmosphere and in political relations with the West.

**Table 1: Rates of Growth of Net Material Product (NMP)**

[Constant prices; official data]

Year(s)	NMP				Utilized NMP					
	Total	Indus- try	Construc- tion	Agri- culture	Total	Consump- tion	PIC <sup>1</sup>	PIC per capita	Total Invest- ment	Invest- ment in fixed capital
1971	8.1	8.5	5.0	8.3	9.8	7.7	7.0	6.1	15.2	10.2
1972	10.6	10.4	21.3	5.4	12.5	9.1	8.8	7.9	20.9	26.7
1973	10.8	11.6	16.3	3.4	14.3	8.1	8.5	7.5	27.8	27.7
1974	10.4	12.0	13.7	-2.9	12.0	7.4	6.8	5.7	20.5	22.3
1975	9.0	11.4	11.1	-8.1	9.5	11.1	11.3	10.3	7.0	12.1
1976	6.8	9.1	6.8	2.0	6.5	8.8	8.7	7.6	2.4	-0.9
1977	5.0	7.6	0.0	0.2	2.2	6.8	6.6	5.5	-6.5	2.7
1978	3.0	2.7	0.7	7.3	0.5	1.7	1.0	0.1	-2.0	-4.0
1979	-2.3	-1.7	-7.7	-5.6	-3.7	3.1	3.2	2.5	-19.2	-15.4
1980	-6.0	-4.1	-21.4	-15.5	-6.0	2.1	2.3	1.1	-29.6	-25.4
1981	-12.0	-14.6	-25.1	1.4	-10.5	-4.6	-4.1	-4.9	-27.6	-24.2
1982	-5.5	-4.5	-8.4	4.9	-10.5	-11.5	-14.6	-15.4	-6.6	-19.9
1983	6.0	5.8	7.7	5.1	5.6	5.8	6.2	5.2	4.9	9.5
1984	5.6	5.4	8.1	5.3	5.0	4.4	3.8	2.8	7.3	12.3
1985	3.2	4.0	4.3	0.1	3.3	2.9	2.2	1.4	7.2	4.9
1986	5.2	5.7	3.8	5.0	4.7		2.5	4.4		3.7 <sup>2</sup>
Averages										
1971-75	9.8	10.8	12.4	0.1	11.6	8.7	8.5	7.5	18.1	19.6
1976-80	1.2	2.6	-4.9	-2.6	-0.2	4.5	4.3	3.4	-11.8	-9.2
1981-86	-0.8	-1.1	-3.6	3.4	-1.6	-0.8	-1.6	-2.5	-4.0	-4.8
1986-90 <sup>3</sup>	3.5			3.2	2.4		1.8		5.9	
1986/1978		93			88		95		70	

<sup>1</sup> Consumption from personal income<sup>2</sup> In socialist economy<sup>3</sup> Plan

Sources: G. U. S., Rocznik statystyczny 1981 (Statistical Yearbook 1981), Warsaw 1981; G. U. S., Rocznik statystyczny 1986 (Statistical Yearbook 1986), Warsaw 1986; Gospodarka planowa, No. 7-8, 1985, 409; Zycie gospodarcze, No. 12, 1987, 10-11. Foreign Trade Research Institute, Selected Data on Polish Foreign Trade, Warsaw 1987, 5.

**Table 2: Rates of Growth of Imports and Exports**

[Constant prices; official data]

Year(s)	From socialist countries	Imports From other countries	Total	To socialist countries	Exports To other countries	Total
1976	7.8	11.4	10.3	-0.3	12.3	5.4
1977	12.3	-10.9	0.4	10.6	4.0	8.8
1978	4.0	-2.0	1.5	7.5	2.9	5.7
1979	1.7	-4.5	-1.2	9.6	2.1	6.8
1980	2.4	-7.2	-1.9	-9.5	5.0	-4.0
1981	-6.3	-31.5	-16.9	-17.0	-22.1	-19.0
1982	-5.6	-24.2	-13.7	16.6	0.9	8.7
1983	4.4	6.6	5.2	8.3	12.4	10.3
1984	9.2	7.4	8.6	10.0	9.0	9.5
1985	4.6	13.4	7.9	8.1	-6.5	1.3
1986	5.1	1.9	3.6	8.5	0.9	4.6
1987 <sup>3</sup>	3.9 <sup>1</sup>	4.8 <sup>2</sup>	4.8	8.6 <sup>1</sup>	5.1 <sup>2</sup>	4.8
1982/1978	92.1	46.0	69.5	96.0	84.3	90.1
1986/1978	115.0	60.0	88.8	136.0	97.5	115.2

<sup>1</sup>In trade with the First Payments Region (Transferable Rubles)<sup>2</sup>In trade with the Second Payments Region (U.S. Dollars)<sup>3</sup>January-OctoberSources: G.U.S., Rocznik statystyczny handlu zagranicznego 1986 (Statistical Yearbook of Foreign Trade), Warren 1986, 5; Zycie gospodarcze, No. 8, 1987, 11; No. 12, 10-11; No. 48, 11.

**Table 3: Rates of Growth in Nominal Income, Expenditures and Savings**

Year	Nominal Incomes	Wages	Social payments	From individual agriculture	Expenditures goods and services	Savings [deposits and cash balances]	Cash balances	Price of goods and services
1980	<u>10.0</u>	13.0	15.0	8.8	9.0	13.0	24.2	9.4
1981	<u>27.0</u>	26.0	37.0	39.0	17.0	38.0	37.9	21.1
1982	<u>64.0</u>	46.0	139.0	66.0	67.0	37.0	50.5	104.5
1983	<u>24.0</u>	26.0	19.0	6.0	31.0	21.0	19.6	21.4
1984 <sup>1</sup>	<u>(13.8)</u>	(16.9)	(12.3)	(6.1)	(16.4)	(-19.0)	(-9.8)	NA
1984	<u>19.5</u>	17.9	17.9	9.7	22.0	16	14.8	14.8
1985 <sup>1</sup>	<u>(17.0)</u>	(19.0)	(11.6)	(7.2)	(17.5)	(7.9)	(11.9)	(13.0)
1985	<u>23.9</u>	19.0	13.6	19.1	18.5	30.5	23.0	15.0
1986 <sup>1</sup>	<u>(12.8)</u>	(14.3)	(25.6)	(6.8)	(17.1)	(56.6)	(-20.3)	(13.0)
1986	<u>20.3</u>	21.1	23.9	19.5	23.3	-8.2	-19.7	18.0
1987 <sup>1</sup>	<u>(18.8)</u>	(14.7)	(31.1)	(14.4)	(21.7)	(-17.3)	(13.4)	(12-13)
1987 <sup>2</sup>	26.3	21.8	30.0	19.5	27.5	12.4	47.7	26

<sup>1</sup>Plan

<sup>2</sup>January-October

NA = Not available

Sources: *Zycie gospodarcze*, No. 5, 1986, 15; No. 6, 1986, 11; No. 48, 1987, 11; *Rzeczpospolita*, February 3, 1987.

**Table 4: 1981-85 Demographic Factors  
Forecasts for 1986-2000**

Factor/Forecast	1981-85	1986-90	1991-95	1996-2000
Average rate of growth	4.5	3.3	2.7	2.6
Population Increase <sup>1</sup>				
Total	1,622	1,228	1,035	1,030
Working Age <sup>2</sup>	564	326	705	996
Below Working Age	745	389	-140	-271
Above Working Age	313	513	470	305
Increase in Non-Working Age Population <sup>3</sup>	1,876	2,767	468	34
End of period population <sup>4</sup>	37.3	38.6	39.6	40.6

<sup>1</sup>In thousands of persons

<sup>2</sup>18-59 for men; 18-64 for women

<sup>3</sup>Per 1,000 increase of working age population

<sup>4</sup>In millions

Source: K. Dzieńcio, "Procesy demograficzne w Polsce do roku 2000 i ich konsekwencje".

**Table 5: Production of Some Raw Materials and Intermediate Goods 1970-85 and Plan for 1986-90**

Commodity	Unit	1970	1978	1979	1980	1981	
Hard coal	mln. tons	140	193	201	193	163	
Lignite (brown coal)	mln. tons	33	41	38	37	36	
Coke	mln. tons	17	20	20	20	18	
Gasoline	th. tons	1624	3530	3329	3282	2785	
Diesel oil	th. tons	2239	5354	5193	5093	4249	
Gas	mln. m <sup>3</sup>	5182	7991	7335	6329	6172	
Electric power	billion KWh	65	116	117	122	115	
Rolled products	th. tons	8136	13565	13572	13551	11064	
Steel pipes	th. tons	723	1164	1151	1133	1042	
Copper	th. tons	72	332	336	357	327	
Zinc	th. tons	209	222	209	217	167	
Lead	th. tons	55	87	84	82	69	
Silver	tons	231	680	702	766	640	
Sulphur	th. tons	2683	5051	4830	5164	4773	
Caustic soda	th. tons	326	489	454	433	417	
Nitrogen fertilizers	th. tons	3142	4045	3790	3564	3527	
Chemical fibers	th. tons	138	252	244	256	205	
Cement	mln. tons	12	22	19	18	14	
		1982	1983	1984	1985	Increase (%) 1985-90	Output 1990
Hard coal	mln. tons	189	191	192	192	1.8	195
Lignite (brown coal)	mln. tons	38	43	50	58	39.6	81
Coke	mln. tons	17	17	17	16	16.8	19
Gasoline	th. tons	3031	3595	3601	3771	0.4	3786
Diesel oil	th. tons	443	4567	4649	4833	10.0	5316
Gas	mln. m <sup>3</sup>	5555	5491	6087	6390	14.8	7336
Electric power	billion KWh	118	126	135	138	11.4	154
Rolled products	th. tons	10477	11731	12195	11845	8.3	12828
Steel pipes	th. tons	940	995	1010	992	2.9	1021
Copper	th. tons	348	360	372	382	9.1	417
Zinc	th. tons	165	170	176	180	8.9	196
Lead	th. tons	79	81	83	87	8.6	94
Silver	tons	657	678	744	831	11.2	924
Sulphur	th. tons	4935	4999	4990	4876	0.0	4876
Caustic soda	th. tons	378	408	395	384	7.3	412
Nitrogen fertilizers	th. tons	3568	3741	3814	3458	21.6	4205
Chemical fibers	th. tons	203	230	240	241	6.8	257
Cement	mln. tons	16	16	17	15	4.0	16

Sources: G.U.S., Rocznik statystyczny 1981 (Statistical Yearbook 1981), Warsaw 1981, 235-238; G.U.S., Rocznik statystyczny 1986 (Statistical Yearbook 1986), Warsaw 1986, 225-228; Gospodarka planowa, No. 7-8, 1985, 406-407.

**Table 6. Unfinished Investments in the Socialist Sector of the Economy**

[NDMP = National Domestic Material Product]

	Billion Zloty (Current Prices)								
	1975	1978	1979	1980	1981	1982 <sup>8</sup>	1983	1984	1985
Outlays needed <sup>1</sup>	714.7	1,081.6	1,186.6	1,292.3	1,216.6	3,339.2	3,339.2	3,637.8	4,637.8
As % of NDMP	49.2	55.0	59.6	63.0	54.9	71.2	58.3	51.3	54.4
Outlays made <sup>2</sup>	360.7	620.9	664.8	797.5	835.5	1,113.5	373.1	1,711.7	2,118.2
As % of NDMP	24.8	31.6	33.4	38.9	37.7	23.8	23.6	24.1	24.8
Current outlays <sup>3</sup>	360.1	431.4	391.7	361.1	278.7	658.5	816.7	1,076.0	1,350.6
Completed <sup>4</sup>	276.9	350.6	348.3	256.9	240.3	380.5	557.6	733.8	941.5
Stopped Projects:									
Value <sup>5</sup>	-	-	-	-	324.0	NA	492.0	442.2	365.8
Spent <sup>6</sup>	-	-	-	-	-	-	105.6	87.0	69.8
% Spent <sup>7</sup>	-	-	-	-	-	-	21.5	19.7	19.1
	As a Percent of Outlays Needed to Complete Unfinished Investment Projects								
	1975	1978	1979	1980	1981	1982	1983	1984	1985
Outlays needed <sup>1</sup>	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
As % of NDMP	-	-	-	-	-	-	-	-	-
Outlays made <sup>2</sup>	50.5	57.4	56.0	61.7	68.7	33.3	40.4	47.1	45.7
As % of NDMP	-	-	-	-	-	-	-	-	-
Current outlays <sup>3</sup>	50.3	39.9	33.0	27.9	22.9	19.7	24.1	29.6	29.1
Completed <sup>4</sup>	38.7	32.4	29.4	19.9	19.8	11.4	16.4	20.2	20.3
Stopped Projects:									
Value <sup>5</sup>	-	-	-	-	26.6	NA	14.5	12.2	7.9
Spent <sup>6</sup>	-	-	-	-	-	-	3.1	2.4	1.5
% Spent <sup>7</sup>	-	-	-	-	-	-	-	-	-

<sup>1</sup>To complete unfinished investment projects

<sup>2</sup>Total on unfinished investment projects

<sup>3</sup>Current year outlays for new, expanded, and modernized buildings and purchased machines and equipment

<sup>4</sup>Value of projects completed during current year

<sup>5</sup>Total value as of year end

<sup>6</sup>Outlays already made

<sup>7</sup>As a percent of total value

<sup>8</sup>Revaluation of capital needs

NA = Not applicable

Sources: G.U.S., Rocznik statystyczny 1981 (Statistical Yearbook 1981), Warsaw 1981, 188; G.U.S., Rocznik statystyczny 1984 (Statistical Yearbook 1984), Warsaw 1984, 179; G.U.S., Rocznik statystyczny 1985 (Statistical Yearbook 1985), Warsaw, 1985, 183; G.U.S., Rocznik statystyczny 1986 (Statistical Yearbook 1986), Warsaw, 1986, 188, 192; Zycie gospodarcze, No. 6, 1986, 6.

# **THE DECLINING PERFORMANCE OF THE POLISH ECONOMY: A COMMENT**

by  
Paul Marer  
Professor of International Business  
School of Business  
Indiana University  
Bloomington

## **INTRODUCTION**

Professor Fallenbuchl's essay elaborates the main constraints on a sustained improvement of Poland's economic performance. He shows that the constraints, taken together, are formidable, and I agree with him fully. He ends with the recommendations that Poland implement its planned economic reforms fully, develop an economic strategy that will make the economy more flexible and productivity-oriented, and cooperate with the International Monetary Fund and the World Bank to obtain a package of credits linked with the implementation of economic reforms. These, of course, are very general conclusions.

The following comments go beyond the topics covered in the essay and focus on three issues that non-specialists might find useful in thinking about the economic situation and prospects of Poland and of the other East European centrally planned economies (CPEs).

The first issue is that of measuring and interpreting the economic performance of a CPE such as Poland.

The second issue summarizes my understanding of the basic reasons why Poland and several other East European countries have gotten themselves into major economic difficulties.

Third, the author speculates about what it would take for Poland to get back on the road to sustained good economic performance.

## MEASURING ECONOMIC PERFORMANCE

Statistical measures of the economic performance of a CPE such as Poland face two major sets of problems. One is due to the statistical shortcomings of several standard performance measures because some of the indicators have been "politicized" in various ways. The other problem results from the fact that performance indicators are difficult to interpret, owing to the unique features of the CPE system.

Take that most frequently cited measure of performance, the rate of economic growth. It is measured by subtracting inputs expressed in constant prices from gross output, also expressed in constant prices, to arrive at something roughly equivalent to "value added." In most CPEs, these computations are carried out in ways that tend to yield various degrees of upward bias. One problem is that the gross value of production in *current* prices tends to be exaggerated in the reports made by the producers because the main criterion by which an enterprise's performance is evaluated is whether it fulfills or overfulfills its production targets, often set unrealistically high.

Perhaps more important is the problem that the price indices employed to deflate current production to obtain constant-price series tend to be upward biased, for several reasons. For example, products are often redesigned slightly and then labeled new products, to be introduced at significantly higher prices. Because the output deflator is thus biased downward, output measured in "constant" prices will be inflated. Supervising agencies that may collect, process, and forward the data to the central statistical office have little incentive to put a stop to such practices, since their own performance is judged in part by how well the producers under their supervision are performing. Central statistical agencies may also be under explicit or implicit political pressure to show good results, which may prompt them, for example, to use methods of index number construction that will yield more impressive results than some other, perhaps more standard methods would yield.

An even more critical issue is that of interpretation. Growth rates of output, whether or not measured "accurately," do not reveal how well the products meet the needs of the user. In Poland, as well as in all the other CPEs, a significant and perhaps growing share of the goods and services produced is not good enough to be salable on the world market and sometimes even on the protected regional market. Moreover, a large share of output would be purchased neither by domestic producers as inputs nor by domestic consumers as final products if users had access to goods and services of better quality that are readily available to their counterparts in much of the rest of the world. In countries with convertible currencies and with import restrictions that are not prohibitively high, customers generally have a choice between domestic products and imports.

Thus, both because of measurement problems and because the quality and assortment of a portion of what is produced are unsatisfactory, planners and politicians in a CPE may draw unwarranted conclusions about the performance of their economy when they consider the generally impressive official numbers on economic growth. And if the statistics on growth rates are not accurate, productivity measures will also have problems, since these relate the growth of inputs to the growth of output.

The problems just noted are now recognized even in the USSR. Regarding the measurement bias, two Russian economists published a coauthored article in *Novi Mir* (1987, No. 2), which states in part:

Careful calculations, based on about 100 different types of machinery and equipment, showed that while during 1976-83 the physical quantity of these goods increased by 9%, their constant ruble value went up by 75%. Officially, only the latter statistics exist; it is the basis for evaluating the rate of economic growth of the machinery sector. Although the speed of growth is impressive, it is not clear where this huge increment in production has disappeared. The answer: the said machinery simply does not exist.

As to the utility of what is produced, let me cite one of Gorbachev's

chief economic advisors, Abel Aganbegyan (August 1987 presentation he gave in Moscow, in manuscript):

A significant share of goods produced [in the USSR] does not satisfy social requirements and is, consequently, superfluous.... While we produce twice as much metal as the USA, we buy rolled metal in other countries. The USSR produces 4.5 times more tractors than the USA, though we have a smaller grain-growing area.... Eliminating this wasteful production is the key task in restructuring the economic mechanism.

Those who cite official statistics on economic growth rates to assess Poland's economic performance may thus well be using a yardstick that does not measure accurately what growth rates are supposed to measure. To be sure, there are significant differences among the CPEs in the degree to which their official statistics are upward-biased and the extent to which the quality of their goods and services leave things to be desired. There are CPEs (e.g., Romania) whose data are much more problematic than Poland's, and there are others (e.g., Hungary) whose statistics may be a notch better than Poland's. But admittedly, it is difficult to be precise about such matters. (For details, see Paul Marer, *Dollar GNPs of the USSR and East Europe*, The Johns Hopkins University Press for the World Bank, 1985).

The number of unemployed, total and expressed as percentage of the work force, is another key performance statistic. Poland and the other CPEs can boast of very little unemployment. In certain respects, the authorities can be justly proud of this achievement. At the same time, Poland (and all the other CPEs) suffer from disguised unemployment, as a result of factories, offices, and farms — not very sensitive to costs — often employing more workers than they really need. A related problem is that jobs and salaries tend to be guaranteed irrespective of performance. No standard statistical measure captures fully this aspect of "hidden" unemployment.

Or take the data on inflation. One problem is that the extent of true

retail price inflation tends to be understated. The motivation, again, is political. There are pressures to use a sample basket of goods and services and methods of index number construction that tend to understate the tempo of consumer price increases. The other problem is that of interpretation. Although in recent years Poland has experienced quite a bit of open inflation, there are still chronic shortages and queues, and widespread corruption to secure access to goods and services on a timely basis and in the desired assortment. While price controls keep open inflation lower than it would otherwise be, the resulting shortages and forced substitutions represent costs to consumers that are not revealed by the official rate of inflation.

If consumer price indices do not measure inflation accurately, then all official statistics on real wages and the standard of living will be biased also.

To be sure, not all performance indicators are subject to bias or misinterpretation. There is nothing wrong, for example, with the data on Poland's external debt in convertible currencies, since that is an externally verifiable statistic. It was a problem, however, that until a few years ago apparently not even the country's top officials were fully aware of the magnitude of the debt problem and its implications. The same political forces that have been creating or condoning biased statistics appear to have been responsible for hiding or minimizing the debt problem as long as it was possible to do so. (For documentation, please see Sarah Terry, "External Debt and the Polish Leadership," in P. Marer and W. Siwinski (eds.), *Creditworthiness and Reform in Poland: Western and Polish Perspectives*, Indiana University Press, 1988.)

Poland's long-term economic performance has been less satisfactory than indicated by its official data. This is best captured by evidence, some quantifiable and some not, that suggests that for some time the country has been falling gradually behind the countries of Western Europe in terms of the rate of growth of productivity, the level of technology, export competitiveness (as revealed by Poland's loss of world market shares in

manufactures), and in the standard of living.

## **CAUSES OF DETERIORATING PERFORMANCE**

In seeking to find the basic causes of why many CPEs sooner or later encounter sustained economic problems, it is helpful to start with the fundamental set of beliefs and objectives of communist leaders. Their beliefs and objectives are important because they largely determine the nature of their political and economic systems as well as their economic policies, which lie at the root of economic performance.

Communist leaders in Eastern Europe have two fundamental political-systemic and six socio-economic objectives.

The prime political-systemic objective is to maintain the leading role of the party. In practice, this means a monopoly over ideology and political power. The justification is Marxist-Leninist ideology, and the assumption that a monopoly of political power and ideology are essential for achieving all the other fundamental objectives. One implication of this for the economy is "management by mistakes." That is, once the party decides on economic policy, usually on the basis of political considerations and with rather imperfect economic information and understanding, the course will not be changed until overwhelming evidence accumulates that the policy is leading the economy in the wrong direction. There are no market forces, or free and open debate, to help steer the economic ship.

The second political-systemic objective is to place all important means of production into state ownership (social ownership in Yugoslavia), which is preferred over collective ownership, which in turn is considered superior to private ownership. The basis of this belief is Marxist ideology, which traces capitalism's ills to private ownership, and the assumption that socialist ownership is essential for achieving the other fundamental objectives because it is the most compatible with central planning. One implication of this for the economy is that the functions of ownership — such as appointing, evaluating and rewarding managers and deciding on the al-

location of profits — are performed by party and state officials, largely on the basis of political considerations or unexamined economic assumptions. Another implication is that private enterprise is only tolerated, for practical reasons. Any "concessions" are granted to the private sector reluctantly and on a temporary basis. This is why in a country like Poland, although private enterprise exists, it operates in a hostile environment and with an uncertain future. Hence, the sector is not only small in size but is also partly unable and partly unwilling to be dynamic, to serve as an engine of economic growth, as it often does in capitalist countries.

The most basic socio-economic objective of the system's directors is a rapid rate of economic growth, pursued in order to catch up with the more advanced capitalist countries and to enlarge the industrial work force (which is believed to be a more reliable political base than farmers). The economic policy designed to serve this objective typically sets unrealistically high production targets, focusing on the quantity of output, neglecting quality and costs. This causes the kinds of problems already alluded to when discussing the growth rate, and is a key factor in the wasteful use of all kinds of inputs.

The additional basic objectives are full employment, consumer price stability, a more egalitarian income distribution than under capitalism, and (in the long run) an improved standard of living. All these goals are pursued in order to establish socialism's advantages over capitalism and to consolidate political power. Since unemployment, inflation, a highly unequal income distribution, and the tendency of the working class to remain or become poor are believed to be the ills only of capitalism, CPE's economic policies try to eradicate them. To the extent that all these goals cannot be achieved fully and simultaneously, the policy is to suppress their manifestations (by encouraging the hoarding of labor, by price controls, by prohibitions or high taxes on large private incomes) or, in some cases, by denying their existence. One consequence is that economic policies — based as they are on the "correct ideology" and on goals that, by themselves, are worthy objectives — will be pursued in spite of mounting

evidence of the long-term problems generated by the particular policies that are supposed to lead to their attainment. For example, policies on full employment and wage and salary schemes that, in the name of equality, divorce compensation from performance, blunt incentives. Controls on prices that keep them artificially low discourage production and/or require growing subsidies from the state budget. The arbitrary nature of prices and costs makes it difficult to undertake good economic calculations on which to base decisions.

One further basic objective of the system's directors is close economic relations with the USSR. This is desired for economic as well as for political reasons. Trade with the USSR is believed to be both more stable and more compatible with central planning than trade with capitalist countries. Dependence on the USSR is also preferred as a defensive reaction to Western embargoes and discrimination. For the time being, economic "integration" with the USSR will proceed reasonably smoothly, based partly on an exchange of primary products and, increasingly, on the sale of Polish and other East European manufactures for Soviet energy, raw materials, and semimanufactures. But, over time, this pattern of trade will create serious problems. The Soviet market's willingness to absorb poor quality goods and obsolete equipment is an advantage to the seller only in the short run. In the long run, it imposes a large cost because it reduces the pressure and incentive to innovate and produce "for the market," contributing to producers' falling further and further behind competitors on the world market. The "bill" is presented when Poland and the other East European countries must expand their manufactured exports to the West to pay for the growing quantities of goods and services they must import because they are unavailable, in the desired quantities or quality, from the protected domestic or CMEA markets. And because most of the East European countries have pursued for decades similar industrial policies domestically, and foreign trade policies *vis-a-vis* the USSR, they all have similar types of surplus goods and shortage commodities, so they cannot depend on trade with each other to obtain the additional goods needed.

Since the early 1980s the USSR, owing to severe supply and cost limitations, has been partly unable and partly unwilling to provide large additional quantities of energy and raw materials in exchange for "soft" East European manufactures.

One of the most significant consequences of the domestic economic and CMEA foreign trade policies that Poland and the other East European countries have pursued for decades is that practically all advanced technology and modern consumer goods, as well as growing quantities of energy, raw materials (especially those of high quality), intermediates (including spare parts and subassemblies), as well as agricultural products can be obtained only from the world market. The question: what can these countries use to pay for these imports? During the 1970s the temptation became very strong to rely heavily on Western credits. Several East European countries then borrowed imprudently large sums, Poland being the foremost among them. The problem is not the borrowing itself but the fact that much of the money was invested in political and not in economic projects, and that a combination of the CPE economic system and policies have caused these economies to be weak export performers.

Here we come to one of the many paradoxes of CPE economic policies. While the policy *intention* has long been to avoid heavy dependence on the West, an objective that supposedly could be achieved by giving priority to trade with the USSR, the actual outcome has been just the opposite; Poland and all the East European countries have become increasingly dependent on imports from the West for many essential inputs and products. Thus, even when Polish economist Professor Bozyk states that in the future "scientific and technical progress in Poland will be based on deepening integration among the CMEA countries," he indicates that Poland plans to continue the same policy it has pursued for decades. The outcome, very likely in my view, will not be what is desired.

This brings us to another significant paradox between economic objectives and policies on the one hand, and observed outcomes on the other. For decades, all the East European CPEs have faced severe convertible-

currency balance of payments problems, even though the objective has been to avoid dependence on capitalist countries. The policy response has been to impose increasingly stringent administrative controls on imports from the West and to initiate periodic campaigns to increase exports to the world market. But the outcomes have tended to be the opposite of those intended. The administrative and often arbitrary restrictions on imports often created costly production and convertible-currency export bottlenecks. Sooner or later, as the bottlenecks are revealed, the authorities are forced to license Western imports. In this "management by mistakes" system, many imports are acquired only after costly delays. How can enterprises, exhorted to produce and export sophisticated manufactured goods, succeed against increasingly tough competition on the world market when they don't have the opportunity to acquire — from domestic, CMEA, or Western suppliers — all of the inputs they need, in the appropriate quality and assortment, and on a timely basis? Furthermore, since enterprises know what a hassle it is to obtain permission to import from the West, they stockpile as many Western imports as they possibly can, with large costs to the economy because this increases the pressure on the balance of payments.

Export campaigns tend also to yield short-term gains and cause costly long-term problems. During campaigns, all kinds of incentives are given to managers to increase convertible-currency exports. They will do their best to comply, but often by shorting their domestic customers, i.e., other enterprises that depend on them for supplies. These customers have no place to turn since the system has never fostered domestic competition, supply acquisitions from the CMEA countries must be planned years in advance, and permits to import from the West are exceedingly difficult to obtain. The outcome is more bottlenecks, more efforts by producers to become self-sufficient regardless of costs, and more "management by mistakes" in which much of managers' and planners' efforts are devoted to solving short-term problems rather than formulating strategic plans for the long run. Much long-term planning consists of projecting past trends and

embodies a large dose of wishful thinking.

These, and other examples that could be given of "management by mistakes," also help explain why, during the past decades, there have been such wide discrepancies between what the authorities in Poland planned or projected would happen in the economy and observed outcomes. This is well documented by Fallenbuchl in his essay and in his previous writings.

The following basic conclusions are suggested by this oversimplified exposition of the interaction between an East European CPE's fundamental objectives, economic policies, system features, and observed outcomes.

When communist leaders came to power in Eastern Europe, they brought with them a series of political, economic, and social objectives and assumptions that formed a consistent set of beliefs. These seemed so self-evident and were so important to them that the set of objectives, assumptions, and policies was practically turned into dogma. The basic political and economic systems that were created represented institutional arrangements the leaders believed to be appropriate for achieving their fundamental objectives. The economic policies followed largely from the fundamental objectives and from assumptions about how best to go about implementation.

The market was replaced by detailed central planning based on administrative directives. The main task of the planners was to mobilize inputs and to direct them into their most productive uses.

As long as the planners had at their disposal large resources — human and physical capital as well as energy, raw materials, and other primary products — that could be mobilized or redeployed (initially often employing crude and painful methods), and could rely on inherited infrastructure and know-how to support their endeavors, a rapid rate of economic growth could be realized while simultaneously achieving, or moving toward achieving, several other socio-economic objectives.

Gradually, however, it became clear that it is very difficult to pursue, with the policies actually employed, all the objectives simultaneously and

successfully because there are fundamental and growing conflicts between them. The elaboration of these conflicts would easily take up a separate essay. But the nature of the problem is perhaps obvious from what has already been stated. It is, in essence, that each of the fundamental objectives, or the manner in which they have been pursued, contributes to economic inefficiency, directly and indirectly. So the more a CPE must depend on improved productivity for further economic growth and performance, the more binding become the constraints it faces.

### **IS THERE A WAY OUT?**

This really is a two-part question. First, how much improvement in performance can be obtained through modifications in economic policies, while by and large maintaining the prevailing economic and political system? Second, what kinds of systemic reforms would yield sustained improvements in economic performance?

In my view, policy modifications can yield significant economic gains but cannot transform a CPE into an impressive economic performer.

For example, reducing the rate of economic growth can ease the pressure on the convertible-currency balance of payments by freeing some resources for export and by reducing the demand for imports, but it cannot transform the CPEs into effective competitors on the world market with their manufactures.

Allocating a larger portion of the GNP pie to consumption rather than investment or defense can improve the standard of living but it cannot, by itself, bring about a sustained improvement in productivity that, in the long run, is the only domestic source of improving the standard of living.

Allowing some unemployment may modestly improve the allocation of labor and work discipline, and thus enhance labor productivity, but it cannot compensate for the many other causes that constrain productivity improvements.

Systemic reforms can be thought of as two types. One is enlarging the

scope and operational autonomy of the private sector, the other is giving greater autonomy to managers in the socialist sector.

Enlarging the scope and freedom of the private sector can bring about substantial improvements in countries where the agricultural sector and the rural economy are important, but only modest improvements in countries where a large state industrial sector is dominant. The limitation is political-systemic in that up to now private enterprise has not been considered a permanent part of the economy's long-term future.

I am not very optimistic that reforms of the Hungarian or Polish types in the socialist sector — in which "indirect," mostly financial, regulators replace administrative directives — can yield significant improvements. The main impact of these reforms, in the absence of introducing genuine market mechanisms, is that the bargaining between producers and the authorities is no longer over plan directives but over the producer-specific application of the "regulators," such as taxes, subsidies, wage regulations, bonuses, tariffs, and so on. This is why I do not have much faith that "perfecting the existing mechanism" will yield significant improvements, as Professor Bozyk apparently does.

In my view, the basic constraints on Poland's economic performance are the two fundamental political-systemic objectives: the monopoly of the party over political power and ideology and a commitment to the preservation of the predominantly non-private ownership of the means of production. Both of these, individually and in combination, assure that economic decisions will continue to be based mainly on ideological-political-bureaucratic considerations rather than on economic criteria.

Since these two fundamental political-systemic objectives represent, in many ways, the very essence of a communist system, the ultimate real constraint on economic performance is the political system. Only if those objectives are given up and a genuine market mechanism, with a supporting institutional framework, is introduced and is allowed to make, say, about two-thirds of the economic decisions, is it likely that the economy of Poland (and those of the other CPEs) will have a chance to realize their

leaders' worthwhile socio-economic objectives.

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58. G. Smulska, "Punkt krytyczny" (A Critical Point), *Zycie gospodarcze*, No. 1, 1986, 6.
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60. "O perspektywie...", 5.
61. W. Gadowski, "Szybko, wolno czy inna droga?" (Fast, Slowly, or Through a Different Way?), *Lad*, No. 30, 1987, p. 7.
62. See, for example, T. Jezioranski, "Podyskutujmy o II etapie reformy: Niepokoj" (Let Us Discuss the Second Phase of the Reform: Anxiety), *Zycie gospodarcze*, No. 41, 1987, 3; "O polityce gospodarczej w II etapie" (On Economic Policy in the Second Phase of the Reform), *Zycie gospodarcze*, No. 43, 1, 4-5.
63. Kaleta, *op. cit.*, 11; Parkola, Rapacki, Rosati, *op. cit.*, 6; W. Wilczynski, "Problemy strategii i polityki gospodarczej Polski Ludowej," (Problems of Economic Policy and Strategy of the People's Poland), *Gospodarka planowa*, No. 9, 1985, 469-474; B. Jasinski, "Zagrozenie strukturalne" (A Structural Difficulty), *Zycie gospodarcze*, No. 44, 1986, 3.
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