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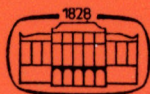
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M. SIMAI

ISSUES AND IMPLICATIONS OF FOREIGN ECONOMIC POLICY IN HUNGARY*

The importance of international economic relations has increased in the development of the Hungarian economy: the importance of external resources has increased, the import content of investments has become more substantial and new projects have been more foreign trade oriented. The increasing importance of international economic strategy for Hungary is closely connected with the economic disturbances of external origin. Hungary devotes special attention to those aspects of international economic strategy which want to solve the problems by radical changes in the patterns of output. A decisive issue is the choice of partners. Economic analysis indicates relations with the third world. Relations with developed western countries largely depend on further political improvements and also on the use of new forms in cooperation.

The great changes in world economy, and the international effects of economic disequilibria and problems arising in certain regions of the world confront each country with new conditions for the remaining part of the 20th century. The part of economic policy that formulates expectations, ideas or objectives bearing on international economic relations has obtained key importance. This goes particularly for countries that are largely dependent on international economic relations, and for those that wish and can take effective action in this field. The importance of means employed by different countries for the realization of their foreign economic objectives differs as well. The situation is also new, because 150 countries with different social systems are simultaneously searching for conditions to improve their world economic position. They are on different levels of economic development, and differ in size and potentialities. At the same time their interdependence is growing.

The growing importance of an external economic strategy in economic policy is closely related also to the increased political importance of international economic relations.

World political and world economic processes are becoming intertwined not merely in the earlier manner, but certain important problems of world economic relations are moving out of the enterprise sphere, i.e. that of traditional economic institutions: world economic consultations among states have gained in importance, and they increasingly encompass coordination of national economic and business policies, as well as the international collation of the sets of means and objectives of foreign economic policy.

Domestic and international efforts and experience already allow certain scientific generalizations, yet they also make new demands on scientific research: it should more efficiently help Hungary in understanding the changed external conditions, in following the tendency of changes, and in drawing the proper conclusions.

*Based on the author's inaugural address at the Hungarian Academy of Sciences on Feb. 24, 1977.

External economic policy, i.e. foreign economic strategy has a special place within the economic policy of governments. Since it is related to the international consequences of national economic policy and to the reaction of the latter to world economic impulses, it intends to affect such medium and to cushion effects coming therefrom, as is generally rather difficult for it to influence.

The joint effects of several factors assert themselves in the development of Hungarian external economic strategy. Among them there are such as the exact evaluation of the world economic situation of the country; adequate recognition of our interests; correct formulation of the international aspects of changes in the national economy; knowledge of the mechanism connecting the Hungarian economy to the world; understanding the trends of world economic and international political changes, and the drawing of correct consequences.

It follows that an external economic strategy of a country is a part of the national economic development conception, first of all in the medium- and long-range covering five years or a longer period. It happens, of course, that external economic strategy has to be modified within shorter periods because of changes in the world economy or certain problems of the national economy.

Hungarian economy and foreign relations – problems of an “open” economy

The importance of international economic cooperation for the Hungarian economy has been growing in the last decade. This is natural, since Hungary is a small European country. Its share in the production of CMEA countries amounts to 1,7 - 1,9 per cent, and in world production to 0,5 per cent (1975 data).

The factors traditionally adding to the importance of international economic relations (the foreign origin of about 50 per cent of the energy utilized, and of about one-third of the total raw-material consumption; the fact that the value of Hungarian exports amounts to about half of the national income, etc.) have been complemented by new ones. *Such a factor is the increasing weight of new technology of directly foreign origin.* Hungary, although having important scientific and development potentials, is a typical “following” country. An increasing part of new technologies introduced in the past decade (manufactured goods, production processes) has come directly from foreign countries. The share of amounts paid for foreign patent rights, licences, and know-how has been increasing in the Hungarian balance of payments.

Further: *in recent years international economic relations have been playing a more important role also in financing the expansion of the economy.* This is natural for a small country, since in a given development period, particularly at the time of important structural changes, the resources limited by domestic accumulation would inevitably hinder the realization of the set objectives. In the current five-year plan period at least 5 per cent of total investment will be implemtened with the aid of external resources. *The share of technology and machinery of foreign origin is also growing in investments.* In the early 1970s 50 per cent of investments in machinery and equipment was of foreign origin, 56 per cent of this from socialist countries and 44 per cent from developed capitalist ones.

(Between 1960 and 1965 the share of foreign machines and equipment was 41,8 per cent, of which 76 per cent came from socialist countries and 24 per cent from advanced capitalist countries.)

That large investment projects finished in the past years or still in process generally add, to rather than reduce, the importance of foreign economic relations for Hungary and that, because of the above-mentioned changes, the import- and export-elasticities of Hungarian national income can hardly diminish in the coming 5 to 10 years are basic realities that cannot be neglected when formulating the country's external economic strategy.

In Hungarian economic literature the word "open" has been used for years to characterize the Hungarian economy. In fact, the Hungarian economy is not open. In the institutional interpretation of the term none of the socialist economies are open.*

An economy can be regarded as open if impacts originating outside assert themselves in the domestic economic processes immediately and practically without limitation. E.g. the rising foreign price level penetrates immediately into the domestic producer and consumer prices, thus directly affecting the level of incomes and demand. At the same time, the rising or falling export prices affect branches producing for exports. Under such circumstances the balance of payments plays practically a regulating role in shaping the level of economic activity, and import competition has a direct effect on production.

The Hungarian economy is thus not open in this sense, though it is an economy much dependent on changes in the international economic environment.

Application of the means of government economic policy enables a temporary mitigation of external effects on the one hand, and a distribution of the losses due to changes in international economic conditions in accordance with the hierarchy of economic policy objectives on the other hand. This policy was pursued in Hungary also in the period from 1973 to 1975.

Otherwise, in the case of difficulties that seem to be temporary such measures have to bridge over only these, while in other cases they are to solve perspective tasks and help in reorganizing the economy.

The scope (freedom) of government economic policy is, of course, not unlimited in either case.

A lasting rise of the foreign price level relating to the domestic one, a separation of home and world market prices disorients economic decisions in an economy much dependent on imports, particularly in the micro-economy, i.e. in the sphere of enterprises. This leads finally to such changes in economic structure as will impose practically unbearable costs on the national economy, restricting the possibilities of developing efficient industries, as well as adding to growing foreign debts. Thus it puts a brake on the possibilities of economic development.

*Capitalist countries are not to be considered open any more, either, in the strict sense of the word. Analysis of the actual situation, and of relations prove that after World War II a real "free market" model has not asserted itself in the capitalist countries any longer. Governments interfered with competition and distorted the structure of production on an international scale from what it would have been had there been free trade. Governments interfered particularly strongly with agriculture as well as severely limited imports from developing and socialist countries. Thus, the advanced capitalist countries interfered in the development of the trade- and production structure by using government means, and they also tried to affect outside influences.

Maintenance of the domestic consumer price level when there is a lasting rise in the foreign price level leads also to disorientated, more costly consumption on the one hand, and necessitates considerable government price support on the other. The amount of the latter may grow to such an extent as to cause grave troubles in the state budget. It restrains possibilities of developments covered from budgetary resources and thus slows down economic growth. It is the efficient and vigorous sectors that allow to augment subsidies, but, in the last resort, it is their perspectives that will be limited, and this reacts on the whole economy.

The "freedom" of the state is much restrained also in how it should distribute — after having reduced the foreign effects by fiscal mechanisms or by other means — the losses suffered by the economy.

In principle there are of course, several feasible versions, even if socio-political considerations are taken into account. Possibilities taking into account changes encouraging reorganization are, however, more limited. It is obvious, e.g., that investments cannot be kept down for a longer period and without consequences. Similarly, grave problems and troubles may arise from the reduction or restriction of the growth of personal consumption. Reasonable policy in this respect is selectivity in harmony with economic and socio-political objectives. This requires, of course, a high degree of flexibility, an adequate information basis, a good grasp of things and quick reaction on the part of economic leaders. At the same time it implies an economic mechanism in which the agents in economic life react to measures with adequate speed and in the required direction.

Sources of troubles deriving from foreign economies may lie, of course, elsewhere than in price changes, e.g. in the cancellation of orders on the part of important customers in certain fields, in the stopping of purchases, in delayed shipping of goods bought, or in a poorer quality than expected. Also the worsening of foreign credit terms may bring about a difficult situation. International economic policy has to reckon with such problems. Generally they can be warded off only by the creation of alternative export outlets or import possibilities and may even necessitate urgent reorganization. Such troubles are quite rare, although not excluded, under normal conditions. E.g. Italy, owing to a Common Market decision, stopped its traditional beef imports from Hungary. The Hungarian economy would have suffered a grave loss, had the Soviet Union not bought, for convertible currency, the quantity intended for export to Italy.

International economic security and the new world economic situation

Deterioration of the external conditions of Hungarian economic development since 1974 is one of the most important motives for reshaping foreign economic strategy.

Economic science has been several times blamed — in Hungary as well as in foreign countries — for not having forecast the changes of the early 1970s in the world economy. A few important elements of these changes have been revealed also by Hungarian economists. Yet we were not able and were not in a position to formulate the general effect of changes in their totality, nor could the international political and world economic conditions be foreseen, whose specific coincidence in certain fields led to these sudden changes.

Starting with the building of socialism, prior to the 1970s the external conditions of economic development were in general not unfavourable though there were a few more or less important problems. E.g. the effect of the discriminatory policy of capitalistic countries on the Hungarian economy was not only counter-balanced by the development of CMEA cooperation, but has itself become an important source of economic growth. Changes in world economy, even price changes, and a fast increasing world trade promoted development of the Hungarian national economy in the 1960s and in the early 1970s. *Long-range development ideas formulated in the late 1960s could therefore count on the relative stability* of external conditions. In spite of the fact that some elements of the transformation and long-range deterioration of the world economic environment were already ripening in the 1960s, the changes in the world economy of the 1970s were unexpected in Hungary as well.

It is true that the increasingly out-of-date character of the Hungarian economic structure – in comparison to advanced industrial countries – became manifest already in the late 1960s. It was felt also that the rate of technological progress was not fast enough.

One of the main objectives of the 1968 reform of economic control and management was to improve the international economic position of Hungary. Yet the transformation of the production structure that followed lagged behind requirements and was, indeed, even pushed somewhat into the background because of the favourable tendency of world market price changes.

In the late 1960s it also became clear that Hungary's most important western partners, the member countries of the Common Market, raised increasing administrative difficulties in spite of the improving political atmosphere, and that the forms of East-West cooperation employed thus far were nearing limits beyond which they could be no more expanded. Yet the fact that the unbalanced state of East-West relations would intensify to such an extent, and that this would necessitate the use of more foreign credit sources could hardly be forecast.

It showed already in the years before the "price explosion" of 1973 that the external conditions of the raw-material supply of the Hungarian national economy could only worsen. The Soviet Union – the main raw material supplier to Hungary – was gradually forced to shift the centre of its production to Eastern sites more expensive to exploit and more difficult to reach. Disintegration of the colonial system was nearing completion and developing countries started to demand, with increasing insistence, an organization of raw material markets better suiting their interests. Low raw material prices hampered the raising of production of a number of important raw materials in the world economy for long years. Yet the sudden price explosion, and the actual conditions precipitating it – such as a political situation allowing oil prices to quadruple, and the oil embargo in connexion with the Middle-East war – could not be foreseen.

Capitalist inflation and the structural troubles of the international monetary system threw light on the weaknesses of the Bretton-Woods construction and anticipated also the danger of collapse of its main supporting pillars.

It was observed already at the time of the 1969–70 crisis, and even earlier, that economic decline and growing inflation were not mutually excluding factors any longer in a capitalist economy.

Yet, the inflationary over-production crisis of 1973–75 had its surprises for economics as regards both depth and lasting character, as well as its national and international consequences. Between 1973 and 1975, i.e. in two years, prices rose by 26 per cent in the advanced capitalist countries. The rise of prices was of 44 per cent in the U.K., 39 per cent in Japan, 18 per cent in Switzerland, and 13 per cent in the German Federal Republic. In times of peace such price rises in such a short period are unprecedented in the history of modern capitalism. At the same time, the industrial output of the capitalist world was stagnating in 1974 and went down by 18 per cent in 1975. This had not happened since the 1930s. Also the volume of world trade diminished considerably. Imports fell more than exports. Advanced capitalist countries reduced their imports mainly from so-called marginally important markets. Quite a number of capitalist countries put Hungary in this category.

We could not be prepared for a simultaneous deterioration of such extent in external relations with non-socialist firms. Nor could we expect, that our foreign economic problems would be influenced differently and less favourably than in the past by changes taking place in the situation of CMEA countries and in their international economic policies.

This is because the CMEA countries, among them Hungary, feel not only *the effects of unfavourable factors acting in the non-socialist part of the world economy*. The grave structural troubles of advanced capitalist and developing countries and the crisis phenomena emerging in important fields of their economies coincided with consequences of the fact that extensive sources of economic growth had become exhausted in the European socialist countries. This period indicated in itself a series of new and difficult tasks: acceleration of technological development, modernization of the production and consumption patterns and transformation of the infrastructure all became necessary at the same time. The new situation made new demands also in every respect of international economic relations. All this added to the troubled balance of the majority of CMEA countries.

Solution of the new tasks requiring much effort was difficult also because the most important member country of the CMEA, the Soviet Union, twice in this decade suffered a considerable setback of agricultural production, and the technological and structural backwardness of agriculture caused problems also in other socialist countries.

The troubles outside the socialist world economy: the rise in prices and the consequences of the 1973–75 crisis were of greater importance because they found the socialist countries, among them Hungary, in a difficult situation already.

An analysis of certain regions of the world economy and of the system of international economic relations indicate that the unfavourable external conditions will last.

World economic development will be slower than it was in the 10–15 years before 1973. In the coming one or two decades the fast development that was general in the 1960s can hardly repeat itself. Upswing will be more moderate and more contradictory, economic recessions will become more frequent, while structural transformation in fundamental productive sectors will continue in a few leading capitalist countries.

The internal and international structural problems of developing countries will, in general, not lessen in the coming 15 to 20 years. About 10–14 developing countries (oil exporters and a few more industrialized states) will improve their situation considerably.

In the overall majority of developing countries, however, conditions of growth can be rendered more favourable only by means of important social changes.

The economic development perspectives of socialist countries in the coming years are largely dependent on how technological and organizational changes for the improvement of quality and efficiency can be brought about. This includes a considerable raising of the standards of CMEA cooperation, and the creation of better conditions for Hungarian participation in the international division of labour. Nor can we expect that a change in the terms of trade can considerably improve our situation as it did in the past, or can put off realization of the necessary structural changes. The costs of import necessary for economic development and for the maintenance of production will go on rising. World trade prices have changed in recent years in a far from uniform way on the most important markets. The world market price index reflecting the commodity pattern of Hungarian imports has been rising faster than the average price index. The infiltration of high world market prices into Hungarian raw material imports from socialist countries will continue, and will reach a ceiling probably later than was originally expected. At the same time the prices of Hungarian export articles have been rising in the last five years at a rate lower than the average industrial price index. The reason is that behind the changes there are not temporary factors but such as will have a lasting effect: increasing costs of raw material production, the strengthening organization of producers and exporters, the faster than average rise in the prices of high-quality imported raw materials and parts necessary for maintaining production, thus the comparatively higher price of imports necessary at a given development level. Instability and uncertainty in the coming ten years will render more difficult, yet at the same time will promote, efforts towards a better organization of world economic relations. These may evolve at various levels.

One is the intensification of cooperation among advanced capitalist countries. Another can be the joining of forces of developing countries, particularly of the raw-material exporters, in producer's unions such as the OPEC. Through partial realization of the decisions of UNCTAD IV the joining of forces may take place even in a wider global framework in certain fields.

It is with these changes in the background that objectives which have to be realized through international economic strategy have to be formulated, and the means and mechanisms employed in international economic relations have to be revised under external conditions that have become unstable.

Under Hungarian conditions external economic strategy is partly *defensive*, i.e. consisting of activities designed to protect against external effects, and partly *offensive*, i.e. including elements strengthening the economic potential and international competitiveness of the country. There is no rigid borderline between the two kinds but, basically, defensive elements approach *tasks from the aspect of economic security interpreted in a narrow sense*, while offensive elements approach them *from the aspect of higher efficiency*.

Objectives directed at intensifying the international economic security of Hungary have led more than once to economic policy decisions working against the original ideas and conditions. Economic development implemented in the 1950s with a view to reducing dependence on foreign economic relations resulted in an increased dependence on foreign markets and raw materials.

In a more restricted sense security means guaranteed political and economic existence and a related system of conditions. Yet existence and survival are rarely challenged, while most states want more than merely a guarantee of existence. Also the system of conditions necessary for the creation of security is changing. The effort of nations to enjoy their basic system of values is in present conditions closely connected e.g. with the security of the system in which the states exist.

Political security raises mainly social, psychological and military questions, as well as, of course, important economic ones. Military security has been traditionally defined as a situation in which there is no danger of an armed attack. In a similar sense, economic security means that the welfare of a nation is not threatened from abroad. In the narrowly interpreted system of goals of international economic security some countries frequently choose deliberately the alternative of lower efficiency in order to avoid growing external economic vulnerability, i.e. intensification of external economic effects, and they prefer apparently safer home actions to possible gains from international relations. Economic security as an objective is closely related also to the economic development level and living standards attained. Public opinion in a rich country is more inclined to defend the given level and is less prepared to jeopardize it for further possible gains. However, an "isolated" interpretation of international economic security is nonsensical and impossible in today's world.

Yet the world is far from being able to set the creation of collective economic security as a realistic aim. Its economic and social conditions have not yet been established either in global or in regional relations.

At present the aims and possibilities of the various nations are much too different to permit a common approach to collective economic security as a whole:

- The system of economic policy objectives of most capitalist countries does not include the economic security of other states, although today they cannot ignore the economic stability of their partners any longer.

- The extent of external economic vulnerability of countries varies, as does their position within the system of international economic relations.

- Countries have different possibilities to reduce external economic vulnerability by adapting themselves to world economic changes or by influencing them. Also the extent of mutual economic dependence is extremely asymmetrical.

- It is the member nations of the CMEA that have come nearest to developing, at the given level, important elements of a regional collective security within the system of their international economic relations. Yet realization of the possibilities has proved to be an extremely difficult task, particularly if the situation of socialist countries is examined in a wider, global context, and in the light of changing world economic and power relations. And yet — in my opinion — that is the correct way of approach. The example of socialist countries has made it clear both in the positive and the negative sense that statically interpreted, short-range security and dynamic collective security based on the strengthening of economic foundations and economic growth are much different in value, and that the mechanism required to attain a higher degree of collective economic security is not identical with the mechanism of attaining a shortsightedly interpreted economic security.

In today's specific situation collective economic security can be visualised from the aspect of different states only as a system of international compromises, in which nations make sacrifices in certain fields in order to strengthen their security in others.

Therefore, in a correct foreign economic strategy economic security cannot be interpreted in the narrow sense, nor only in a defensive way, but risk and elements of uncertainty must also be taken into account.

Conditions of an export oriented structure and of selective development

The so-called offensive elements of international economic strategy affect both export- and import policy and they influence the forms of cooperation as well as the selection of partners. The most important internal element of an offensive international economic strategy is to transform the structure of economic development, production and consumption in a suitable direction.

Parallel with development, it is an organic part of this policy also to reduce and eliminate certain industries or products, and to regroup labour correspondingly. Similarly to other socialist countries Hungary has worked out the mechanisms of reduction and recognition to a considerably lesser extent than those of development. This also slows down the transformation of the production structure and realization of fast and efficient economic growth.

In countries largely dependent on foreign economic relations, such as Hungary, reorganization may be rendered more difficult by slower development or economic recession in the main partner countries. E.g. the slowing down of economic development in some advanced capitalist countries forecast for the coming decade, or the lower pace of growth of a few socialist countries envisaged in the 1976–1980 plans will disturb the Hungarian structural transformation programme based on an expansion of exports partly to these regions unless the ratio of goods for which demand will be increasing faster than the average will grow in Hungarian production and exports.

The home equivalent of an external economic policy oriented towards exports can be, today even more emphatically than in the past, only a selective development policy: faster development of exportable goods, and the introduction of new products in demand on every market. Selective development implies the intensification of both the domestic and international division of labour, i.e. it may necessitate a corresponding development of the supporting industries and a regrouping of imports. Therefore, the criteria of selective development cannot be formulated in an isolated manner, from the aspect of exports only or imports only. These criteria can be worked out only in a complex framework.

Problems of export-oriented selective development are rendered highly complex by the economic development level of Hungary. The zone in which this country is situated – the upper limit of medium development and the lower one of high development – is one of the "danger zones" in world economy. This is because

a) Industrializing developing countries can break into this zone in a comparatively short time and thus become our competitors in important industrial branches;

b) Measures of advanced capitalist countries taken in defence of their non-leading industries and agriculture affect Hungary more gravely than they do other countries;

c) The process of evening out the development levels of CMEA countries has not been going on so far in a way that cooperation and specialization could have much influenced the emerging industrial structure in countries at approximately the same level. In some cases the parallel structure was reproduced at a higher level, since the technico-economic parameters encourage the creation of a similar industrial structure if the starting point is only home needs or export possibilities outside the CMEA.

It follows from the preceding that "breaking out" of this zone towards an advanced industrial level is a vital question also from the aspect of realizing our external economic aims. That is why it is justified to concentrate efforts on fields where we have attained a level identical with, or approximating that of the leading countries.

At the same time greater efforts are needed in order that the system of cooperation among socialist countries should give more support to the conditions required. This is not in Hungary's interest alone, but a mutual interest of all socialist countries in a similar situation.

Possibilities to establish an advanced economic basis and to improve our situation accordingly are in part given in the system of international economic relations, in part they will have to be created in coming years.

One excellent potential of the country is its comparatively good supply with qualified and, particularly, highly qualified scientific and technical (engineering) staff. However, in order to be able to use this as a comparative advantage, a better organized and more conscious linking of the scientific and development potentials with the production potential is necessary. Furthermore labour qualified to attend to scientific and development tasks, and material resources will have to be concentrated more purposefully in sectors and enterprise systems of key importance for an advanced economic basis able to produce for every market. *It is also beyond dispute that increased efforts must be made to strengthen cooperation in research and particularly in development* first of all with CMEA countries, but also in a broader framework.

The technical and technological bases of the Hungarian economy: products, production procedures and organization have to be considerably up-dated. Our backwardness in respect of the latter factor is generally greater than in other fields determining the technological level. We have to recognize that the basic problem of the Hungarian national economy is not its extensive and increasing dependence on raw material imports, but that it is unable, with raw material prices inevitably rising, to produce finished goods with adequate efficiency and in high quality, which would not only pay for imported materials and technologies but would also produce a satisfactory surplus. (The same applies to the processing of home materials, considering the rise in exploitation costs and the increasing import demand of the extractive industries.)

Modernization of the technological basis requires — in harmony with the demands of selective economic development — that imports of licences and production procedures should be centred on the most important sectors on the one hand, and such technological development policy on the other as is suited to adequately "filter" the new techniques bought, to evaluate their international and national "position" and consequences, one which strives to select from importable technologies the most suitable alternatives from

the aspect of efficiency and adaptability at home, and takes into consideration the effect of imported technologies on foreign trade and their possible effects on other fields of production and consumption. This is particularly important in case of major investment projects. This policy should be capable of selecting among available foreign technological resources in accordance with our interests.

Implementation of such a technological development policy has important staffing and organizational conditions. (Among other things, the innovating potential of enterprises has to be strengthened, beside central organs, and the relevant incentives must be improved.)

Also the mechanism linking the Hungarian national economy to the world economy has to be improved. The system of marketing has to be brought up-to-date, joint ventures have to be employed more frequently in exports, and the new forms of market valuation have to be adjusted to. The foreign economic participation of productive enterprises must be made more immediate, and their interest in raising the efficiency of international economic relations must be increased.

Unforeseeable difficulties of decision taking: two examples

In order to give an idea of the many factors involved in selective development and of the way how different — frequently opposed — factors affect decisions in a given field, I shall examine two examples in greater detail. One is development promoting the exports of agricultural products, the other that of so-called complex production systems or “cultures”.

The natural, scientific and technological conditions of the country for the development of modern agriculture are excellent. If we could raise yields from today's level to that of leading countries with a climate similar to Hungary's, two- or threefold of the volume of home consumption could be exported from various products of Hungarian agriculture. *This would suggest increased efforts to promote agriculture as an exporting sector of decisive importance.* The same is suggested by world demographic data, according to which 50 per cent more people will have to be fed by 2000 than in 1977.

What do external conditions show?

1. *In advanced industrial capitalist countries the system of agricultural protectionism, the greatest obstacle to asserting our comparative advantages, is still strong and is not likely to change much.* This has various reasons: income policy, strategic considerations, international payment problems and far-reaching world economic and international political factors have their part in that advanced industrial capitalist countries protect — and will continue to protect — their agriculture. Even if a growth of exports to these regions can be achieved from time to time, no lasting improvement can be expected, at least not in the coming 10 to 15 years.

2. The developing countries are a highly inconsistent and much differentiated region as a market for agricultural products. For demographic and economic reasons the greater part of the growth of demand will occur in this area in the coming decades, particularly as regards traditional products, first of all cereals. Yet the majority of these countries will not have enough foreign currency to allow them to considerably increase their agricultural

imports in the future either. They will be even less able to buy so-called quality agricultural products from foreign markets. The agricultural policy of developing countries with considerable purchasing powers and in need of food imports wishes (on a national scale or regionally) to reduce their dependence on food imports. Efforts at agricultural self-sufficiency are characteristic of the whole third world.

3. Because of balance of payments problems and other economic and political reasons socialist countries also try to stop their imports of staple foodstuffs or at least to press them down to a minimum.

But the pattern of food consumption in European socialist countries is becoming more and more similar to that in industrially advanced capitalist countries. Since in the period up to 1985 the growth of production and its structural changes cannot keep up with needs in every country, food imports will continue even in good years. In the case of the socialist countries fluctuations in Soviet agriculture have most influenced world market demand. Demand on fodder grain and meat imports will still be maintained since the recent organizational measures and investments in agriculture become fully effective in the long range.

4. In spite of the above mentioned efforts, climatic and weather conditions or economic troubles may give rise to considerable import demands for staple foodstuffs in all three groups of countries. These will be, however, more of a spasmodic character, possibly following such years in which overproduction will have pressed down prices.

This is because relatively slight production fluctuations may cause considerably greater price fluctuations on international markets. In 1972–73 a 4 per cent reduction in the world production of cereals led to a tripling of world market prices. The asymmetry of causes and consequences proves that the international market does not present the situation of a number of agricultural products correctly. E.g. of cereals only a small quantity is traded on the international market in comparison to total consumption, and thus the fluctuations exert their effect with a multiplied force. Because of this asymmetry the development of the food supply situation always has to be analysed very carefully. E.g. the tripling of prices in the early 1970s suggested grave shortages, while production fell back to a small extent only. It may happen, however, that, with a view to the security of food supply, the cereal production of the world will considerably advance in the coming 10 to 15 years by a strengthening of international cooperation which will materialize — at least within certain limits — in mutual obligations, commitments, in regard of deliveries and purchases. This would lead to a more stable though very slowly expanding market.

5. Quality food, canned and processed foods and food specialties are in a better position. For these more permanent and firm demand may be reckoned with both in advanced capitalist and in socialist countries. Selling possibilities of quality foodstuffs in Middle-East oil exporter countries are also permanent and firm. Yet the quality terms (health standards, reliable quality, continuous supply) are becoming stricter. At the same time, international competition is rather sharp also in this zone, and from this aspect a continuous technological development is of *vital importance*. E.g. in advanced industrial countries a new field of demand for frozen foods has emerged: a market for deep-frozen specialties, which might drive out some of the traditional canned foods from the market.

The packing of processed and preserved foods is also decisive, partly for reasons of environmental protection and partly for direct economic reasons (weight, price, etc.).

6. One must certainly reckon with the fact that agricultural production as such and exports in particular are both directly and indirectly import-intensive.

Thus the role of agriculture in the realization of our international economic aims is rather complex and inconsistent, so that only a highly prudent and flexible policy, strongly *selective within the sector, can be expedient*. A similarly difficult problem is presented by the development and exports of the so-called production cultures.

The conviction has gained ground in recent years in Hungary that, wherever the conditions are present, efforts should be made to export complex production and servicing systems. This is in the final analysis a correct, modern and remarkable effort. There are, of course, also ideas that if exports of a product or of a group of products cannot be expanded, attempts must be made to export them as part of a system. In other approaches our correct or forced import practice may be reflected in exports. It may occur, too, that the abstract idea is more a wish than a reality.

1. At present there exist in the world such kinds of demand as are not directed at some definite article, but at the acquisition and introduction of complete turn-key technologies. Such are e.g., in connexion with industrializing agriculture, large-scale pig or poultry or livestock raising, the systems of fodder growing and mixing, processing and packaging, the required machines and equipment, organization experience, agro-biological and technological know-how. A certain demand exists also for complex health service systems, particularly where the health service network is just being laid down. There is also international demand for other production or servicing systems (e.g. the complex handling and utilization of city garbage, complex mechanization of mines, development or transformation of remote control systems of transportation networks, or of telecommunications systems, etc.). Demand for the latter presents itself first of all in advanced capitalist countries.

2. Demand for complex systems is of a particular kind. Such systems are realized usually in the framework of large central or local administrative development programmes. Customers are rarely private companies. In financing them an important role is played by large international and interstate credit agreements. E.g., a considerable part of such exports to developing countries is financed by international or bilateral assistance programmes. Therefore, the condition of obtaining orders is in many cases the granting of state credit to finance exports. (In the case of socialist countries the situation is different.) These supplies are largely intertwined with the system of international training of experts, as well as with the international flow of experts. It is usually not, or at least not the main interest of the enterprises of the supplying country to make direct delivery, but rather to develop a lasting technological dependence. In advanced capitalist countries schemes financed from central subsidies are not a single transaction for private companies, but they open the way to future opportunities for export.

3. Thus the conditions of realizing advantages originating in the exports of production or servicing systems or of cultures are rather varied. The selling country needs not only an own suitable production basis, but also a significant number of national and foreign "reference-establishments" (or models). She has to be able to permanently supply experts in adequate number and of adequate experience. She has to be ready to service any technologies delivered, to replace parts, machines or equipment, as well as imple-

ment technological developments. Besides, she has to dispose of sufficient funds to partially or fully finance the given schemes. Advantages originating in the exports of complex systems diminish to the extent the exporter country is in want of these conditions. Advantages may turn into disadvantages if the guaranteeing of the above-mentioned technical conditions becomes too much a burden.

4. In exporting systems or cultures it should be remembered that technological progress is usually uneven in the various fields of production. In health systems e.g. the fast spread of laser techniques revolutionizes certain fields of surgery, and the combination of computers with health instruments those of diagnostics. Hospitals are generally unable to install all at once. Yet with the introduction of some instrument or system of instruments they can considerably improve their activity in particular fields. Similar examples could be quoted from other areas. The possibility of exporting such systems is largely limited by these tendencies. Sensible developers draw up their purchase list by trying to fit into the given system the best technique available from a country, if they have the means to do so.

5. The export of systems requires by all means a very thorough analysis in countries in which exports have very high import contents and which are generally followers in respect of modern techniques.

Therefore, the export of systems and production cultures can be only an objective of limited importance for Hungary.

Selection of partners: objective and subjective conditions

The strategic aims of international economic policy can be realized only if they conform also to the changing possibilities and needs of the most important partner countries, or, if the direction and structure of economic development in partner countries change in harmony with our needs.

Besides, of course, a readiness to develop and maintain relations is also necessary. From this latter point of view the concurrence of political, strategic, and economic aims in the narrow sense or their deviations, cooperation experience, and the knowledge of each other's efficiency are of extremely great importance. Thus the selection or replacement of partners, and the changes in their importance are not based on subjective desires.

A comparison of the changes taking place in the main groups of countries in the world economy with the interests and perspectives of our country suggests first of all that the strategic importance of cooperation with socialist countries will be increasing, possibly in spite of the fact that the weight of non-socialist countries will be rising a little in Hungarian foreign trade.

The reasons and conditions are the following:

1. Security of international economic relations within the socialist world is an important incentive factor in a world economy where uncertainty remains great for a country of the type of Hungary.

2. In the further organizational development and perfection of CMEA cooperation and, in this context, in the assertion of our common and particular economic interests, as well as in finding suitable compromises Hungary has better prospects than in respect of relations with non-socialist countries.

3. Efforts of CMEA countries to accelerate technological development result in an improvement of possibilities to acquire machines and equipment necessary for technological development from these countries, to which also our export possibilities are more favourable. In this way the international economic equilibrium of the country can be better ensured.

4. Within the CMEA the most important economic partner of Hungary remains the Soviet Union. Her technological and scientific potential and its further development allow us to acquire technology, know-how, machines and equipments for our technological development in certain fields of key importance from Soviet imports. The most important raw materials and primary energy of our economy will be bought from the Soviet Union in coming years and the Soviet market remains the most important buyer of Hungarian industrial products.

5. The needs of our economic development (and in this respect our interests are identical with those of other CMEA countries) demand that long-term cooperation forms of structural importance should be strengthened with socialist countries and, to this end, the planning-, accounting and price systems perfected. As a matter of fact, this is the only field of world economic cooperation on the development and formation of which we can assert our influence to a certain extent.

6. Socialist countries will continue to increase their production and consumption 1,2 – 1,3 times faster than the world economic average also in the coming 10 to 15 years. The home market of the Soviet Union will expand and get differentiated particularly fast.

Fast expansion of the CMEA market and particularly of the Soviet market does not mean, of course, the conservation of an identical pattern of demand and of qualitative requirements characteristic of the past. Both are changing rather fast, which raises increased demands on our export also in this respect.

New conditions are establishing themselves in our international economic relations *also as a consequence of a growing differentiation in the "third world", and of the increasing unevenness of economic development.*

There are enlarged possibilities for exporting quality foodstuffs and those serving mass consumption, agricultural machines, transport vehicles, machine tools, and pharmaceuticals. Exports of technologies, as well as production and organization experience may also be of great importance. In this way we may help developing countries in solving their great problems: improvement of food supply, building up a health-service, promotion of industrial and agricultural development in harmony with the development aims of the given countries.

In our past relation with developing countries we had to face the problem of what to buy from them, how to coordinate their export potential with the needs of the Hungarian national economy, her short and long-term demands. Development of our imports remains a key question also in the future. At the same time, the changes taking place in developing countries and world economic relations open the way to an adequate coordination of our interests.

In the coming decade considerable changes are expected in the exports of industrial finished products of certain groups of developing countries. Analysis of today's production structure and of the plans of a few Latin-American, Asian and African developing countries, as well as of the deliberate industrial relocation policy of some industrially

advanced capitalist countries has revealed that developing countries are likely to appear on the world market with larger quantities of the following industrial articles of primary importance:

a) Semi-finished products and industrial raw materials processed up to a certain degree (e.g. vegetable oil, processed food, sawn goods, pulpwood, paper and basic metals). Production of these articles guarantees for developing countries, beside exporting their raw materials in a more valuable form, also a certain employment possibility. Advanced industrial countries benefit mainly from the saving of transport and investment costs on semi-finished products of smaller weight than raw materials. It is the African countries whose exports in these articles will be particularly important.

b) Traditional and new labour-intensive industrial finished products (ready-made clothing, textiles, underwear, shoes, simple metal ware, furniture parts, plastic and wooden articles). It is the low wage costs, comparatively low mechanization, more and easily achievable quality requirements that will render developing countries particularly competitive in these articles. Decline in the production of these articles may be especially large in the advanced capitalist countries and it is thus likely that developing countries will get increased import facilities and one-sided preferences. According to data considered as likely on the basis of the economic development plans and programmes of developing countries, and considering the industrial structural development concepts of advanced capitalist countries by 1985 about 30 per cent of the textile and ready-made clothing exports of the world, 25 per cent of leather and shoe exports, and 7-10 per cent of metal ware exports will come from developing countries. India, Sri Lanka, Pakistan, Kenya, Senegal, Iran, Algeria, Zambia, the Ivory Coast and several small African states will become and remain the main exporters of these articles.

b) Machines, electrical engineering and electronic products. Producers and exporters of such goods are growing in number among developing countries. Among these goods we find complex and labour-intensive industrial articles, whose majority is made up of parts or units, which are produced for commodities to be assembled elsewhere. In boosting the exports of such products a particularly important role is played by the activity of international corporations. Some moderately advanced developing countries, or which are advanced in a few branches of industry, such as Mexico, Argentine, Brazil, India, Iran, South Korea, Venezuela, Algeria, etc. make efforts in order to export an increasing quantity of vehicles, machines, radio and television sets, electric household appliances, etc. In these articles (with the exception of parts) they have to reckon with considerable competition on the market of developing countries, and with particularly sharp competition in advanced capitalist countries.

d) Basic chemicals, chemical products, synthetic fibres, fertilizers, etc. Especially from the early 1980s these articles will play an important part in the finished goods exports of a few, mainly oil-producing, countries. Particularly Iran, Iraq, Algeria, etc. will become important exporters of these products. A part of these passes to developing countries as a result of the deliberate industrial relocation policy of advanced industrial capitalist countries because of the large water requirements of manufacturing, and the environmental pollution involved. Development programmes of fertilizer production (and exports) in connexion with agricultural production plans are of great importance in some countries, where also considerable export reserves are accumulating (especially in Middle-

Eastern oil-producing countries). The proportion of these articles in the finished goods exports of developing countries will reach 9–10 per cent between 1980–85 and will be near 7–8 per cent of the world exports of this group of products. Developing countries meet with sharp competition in this group of products on international markets. Their comparative advantages are important mainly because of cheap local raw material resources and less rigid laws on environmental pollution. At the same time, however, they are dependent on advanced capitalist countries in respect of licences and technology to a higher degree than in other things.

In certain fields – e.g. industrial consumer goods, household appliances, semi-finished products, chemicals, we can increasingly count on imports from developing countries. This may be particularly important in Hungary, e.g. from the point of view of reducing labour shortages. All this, however, cannot be of an *ad hoc* character. It is only on the basis of a planned division of labour that a permanent and extensive cooperation can be built up. This involves that, if conditions allow it, we shall abandon development of certain products or shall reduce some of them or a few groups of them.

In the coming decade Hungary can purchase increasing amounts of materials and semi-finished products from developing countries, among them also such as are now purchased from other countries. This must entail efforts to conclude long-term agreements. It must be taken into account that in the coming 10–15 years the international raw material market will become probably better organized and the role of long-term agreements will be growing in every area. UNCTAD IV has also voted for starting negotiations on the subject of an integrated raw material programme.

At present 67 per cent of Hungarian imports from developing countries come from 13 countries, and 83 per cent of our export go there. Of course, Hungary will not be able to essentially increase the number of her partners among developing countries in the future either. We must look for partners with whom mutual interests and advantages can be well asserted and where distance is not too much of a restrictive factor.

In the present phase of changes in world economic relations and of Hungarian economic development the objectives of a new foreign economic strategy *in many respects affect also our relations with advanced industrial capitalist countries*. New conditions render difficult a simple continuation of old cooperations – developed in the course of the past 2–3 decades – and promote the development of new forms.

By the mid-1970s our economic relations with advanced industrial capitalist countries went beyond the sphere that appeared in international trade statistics as a sum of simple export and import transactions. True, a determinant role is still played by trade relations based on individual agreements between Western firms and their Hungarian industrial or foreign trade partners. However, an increasing ratio of cooperation is based on long-term licence and industrial cooperation agreements, on common production and joint enterprises. In the development of relations capital transactions, loans, are also gaining in importance.

As a result of the transformation of economic structure, and of the changes in relations between advanced capitalist countries new possibilities are also arising for the development of relations. Realization of these possibilities requires more daring and more flexible forms. These changes may mark also the beginning of a new phase in our relations with industrially advanced capitalist countries. In my opinion, changes in the importance

of industrially advanced capitalist countries in our turnover will depend in the coming 10 to 15 years mainly on how much the new and more advanced means, more permanently integrating the interests and concrete aims of partners, will be applied, such as joint enterprises, industrial-technical cooperation on third markets, etc.

There are certain reserves also for developing traditional cooperation. By raising the standards of our foreign trade activity, and employing forms of market organization and research corresponding to the last quarter of the 20th century we might improve the conditions of relations and increase their volume even in the present situation. It is a further condition that cooperation with socialist and capitalist countries should be much more organically complementary to and supporting each other than in the past.

Further development of relations with advanced industrial capitalist countries may be even promoted by certain changes in world politics and world economic relations if the necessary domestic conditions are provided for in production and organization.

First of all, *the majority of nations in the world are interested in continuing the process of détente*. Therefore we trust that those contained in the closing document of Helsinki will be put into effect (inc. the so-called *2nd basket* envisaging a development of economic relations free from discrimination). At the same time, we assume also that relaxation will allow a deepening of relations as well as the laying down of new forms of cooperation, based more on long-term commitments.

Second, an increased multilateral character of economic relations is probable. For us this means that in relations with developing and advanced capitalist countries the importance of financing, cooperation, specialization and other elements will grow beside trade (i.e. of such joint enterprise and organizational form in which several industrially advanced and several socialist countries take part, maybe together with developing countries). Such tripartite industrial cooperation will be of particularly great importance in the future.

Also in CMEA cooperation — of a determinant importance for Hungary — the multilateral form of relations will become prevailing, and their mechanism will develop.

Third, our relations may be promoted by the structural reorganization taking place in the *coming years* in the economies of West-European capitalist countries and among them of our most important partners. This means partly the reduction of certain industrial branches and partly the growing role of new, modern ones.

Big companies in advanced capitalist countries remove certain labour-intensive phases or whole production cycles to an increasing extent to some developing countries where there is enough cheap labour of adequate training (who can read and write and are easy to train). Yet the intensity of relocation depends in most part on the employment situation in advanced capitalist countries. If unemployment is absorbed but slowly, this process will become more intensive only in the 1980s. Considerations of environmental protection also motivate the removal of industrial branches or certain production phases (especially from capitalist countries with badly polluted environments). Relocation may be accelerated also by the local programmes of a few developing countries encouraging investments by multinational companies. These programmes are destined to promote the primary or further processing of local raw materials and their exports in processed form. The changes taking place as a result of the relocation of industrial branches augment

the imports of advanced capitalist countries and also facilitate the increase of their exports.*

The importance of articles to be removed is enhanced by the fact that they can serve also local consumption and are easily convertible for various markets. We might also take over some products of the relocated industrial branches, and this may, in certain cases, strengthen cooperation with advanced capitalist countries. The technological standards of the manufactures taken over must not be a degradation of the domestic industrial base and it is important that there should be a continued considerable demand for them on Western markets. At the same time, we can join the new and up-to-date branches by supplying parts, units and by building up cooperation in research and development.

Fourth, Hungary's new, export-oriented external economic strategy based on selective industrial development creates favourable internal conditions for increasing economic relations with advanced industrial capitalist countries. The growing capacity of Hungarian economy, efforts at boosting the production of articles demanded on every market of world trade, and the new forms of increasing importance for cooperation will facilitate to raise our relations to a higher level and to make them better balanced.

Fifth, we hold essential efforts directed at settling the comprehensive organizational questions of international economic cooperation. Also with regard to our relations with advanced capitalist countries we turn with great interest to the multilateral world trade negotiations and global settlements within the GATT. We think that Hungarian participation in these negotiations and our efforts that the initial principle of those negotiations should be in fact realized are important elements of our relations with advanced capitalist countries as regards problems of trade policy and external economic policy.

Beside expectable favourable changes also tendencies working against the promotion of relationships may develop in world economy. Such is e.g. a possible considerable slowing down of economic growth in advanced industrial capitalist countries in coming years. This might not only slow down the expansion of demand, but also sharpen competition. Should such a situation emerge in the coming years, long-term agreements and new forms of cooperation will become increasingly important for us as well as for our partners and so will, of course, also the structural changes which will allow Hungary to join the system of international division of labour at a higher level with every country in the last decades of the 20th century.

In the trade with advanced capitalist countries our most important partners will remain the West European ones, that is, the members of the European Economic Community, mainly two industrially advanced countries: the Federal Republic of Germany and Italy. After these two countries Austria remains the third most important capitalist trading partner of Hungary.** With an improvement in trade policy terms our relations with the U.S. could also be considerably enlarged.

*Imports may be affected by changes following removal mainly in the following articles: preserved basic materials for the food industry and canned goods; different yarns, mainly cotton; ready-made clothing, cotton goods and fabrics; leather wear and shoes; metal ware (car parts, toys, kitchenware); simple electric household appliances, radios; metals, alloys, plates, basic chemicals (sulphuric acid, caustic soda, etc.); tyres; stationery goods.

** It is remarkable that 60 per cent of the exports of Hungary to capitalist countries went to three countries. Though not that high the concentration in imports is also considerable.

I think it must be clear from the foregoing that a realistic consideration of our international economic relations, of external conditions, world economic changes, and of the development, requirements, possibilities and disposition of our most important economic partners necessitates changes in the development of our national economy. They demand much more effort now than in the 15 years prior to 1973. The Hungarian economy must be made capable of fast and flexible reaction, as well as of increased risk-taking. This can be achieved only by increasing the efficiency of the system of decision-making on economic policy, planning, implementation and incentives, by improving organization and state discipline at every level, and by rendering our economy more easily surveyable also from the point of view of cost accounting and comparisons. Our tasks, problems, and the narrowing alternatives must be brought nearer the widest public opinion, so that the necessity of quick changes be understood. This is the only way to create harmony between the international and domestic conditions of Hungarian external economic strategy.

The concentration of imports and even more of exports on a few industrially advanced capitalist countries is the result of several factors. A certain role is played in it by tradition. Traditional relations were maintained and even enlarged also in such periods in which sales conditions were worsening in world trade. It is also remarkable that particularly with the Federal Republic of Germany and also with Austria, more advanced forms of cooperations (e.g. industrial technical cooperation) going beyond foreign trade have been applied to a larger extent. Besides, these markets – particularly that of the Federal Republic of Germany – were expanding comparatively faster than those of other capitalist countries, and first of all for such articles which we export to advanced industrial capitalist countries. The abolition or reduction of volume quotas and some other administrative reliefs on these markets also played a part in the increase of turnover. On the side of imports in the early 1970s also such efforts were made that the production (or certain phases of production) of some articles should be removed to Hungary, and a kind of specialization should be established between enterprises. In some cases the development of cooperation with given countries was due to the fact that exports and imports could be easily linked. These factors will considerably influence development of our relations also in the future.

ВОПРОСЫ ВЕНГЕРСКОЙ
ВНЕШНЕЭКОНОМИЧЕСКОЙ ПОЛИТИКИ

М. ШИМАИ

Роль внешнеэкономической стратегии возросла в экономической политике всех стран мира из-за обострения экономических проблем международного происхождения и усиления взаимозависимости. Международная экономическая стратегия занимает своеобразное место в экономической политике государств; с одной стороны, она должна реализовать международные цели национальных экономических политик, а с другой стороны — реагировать на международные изменения.

В развитии венгерской экономики в последние годы продолжало усиливаться значение международных экономических отношений. К действовавшим ранее факторам добавились новые элементы — возросшее значение внешних ресурсов, рост содержания импорта в капитальных вложениях и усиливающаяся внешнеэкономическая ориентация новых капитальных объектов. Тем не менее венгерское народное хозяйство нельзя считать «открытым», так как зависимость от внешнеэкономических связей еще не означает открытого характера. А хозяйственный механизм не позволяет автоматического внутреннего проявления внешних помех.

Увеличение значения внешнеэкономической стратегии в Венгрии связано в первую очередь с помехами внешнего происхождения. Подавляющее большинство их можно было предвидеть — каждую в отдельности, но не их одновременное появление. Из числа оборонительных и наступательных элементов внешнеэкономической стратегии для Венгрии более важными являются «наступательные», то есть факторы, направленные на разрешение проблем путем значительного преобразования экономической структуры. Перспективные экономические издержки т.н. оборонительных решений были бы гораздо более высокими. «Наступательное» решение означает ориентированное на экспорт селективное развитие, соответствующим образом использующее, концентрирующее и развивающее людские, природные и технические ресурсы страны. На практике селективное развитие — дело нелегкое и, как показывают соображения по ориентированному на экспорт развитию сельского хозяйства и других отраслей, задача непростая.

Одним из решающих вопросов внешнеэкономической стратегии является выбор партнеров, причем это — вопрос не субъективных намерений, а объективных условий. Экономический анализ показывает, что и в последующие десятилетия наиболее благоприятными экономическими партнерами Венгрии останутся страны-члены СЭВ. Новые возможности открываются для перспективного развития международного разделения труда с развивающимися странами. Развитие взаимоотношений с развитыми капиталистическими странами в случае сохранения благоприятных политических условий зависит в значительной мере от применения новых форм и методов

Р. НЬЕРШ

ВЛИЯНИЕ МНОГОСТОРОННИХ ИНТЕГРАЦИОННЫХ МЕРОПРИЯТИЙ СЭВ НА ВЕНГЕРСКОЕ НАРОДНОЕ ХОЗЯЙСТВО В 1976–1980 ГОДАХ

В статье рассматриваются роль и значение новой формы сотрудничества стран СЭВ — многосторонних интеграционных мероприятий, участие Венгрии в их осуществлении, проблемы и задачи, требующие своего решения при развитии этой формы сотрудничества в будущем.

Экономическая интеграция стран-членов СЭВ — это комплексный процесс, развертывающийся в различных областях сотрудничающих между собой национальных хозяйств и на различных уровнях хозяйственной деятельности параллельно, но отнюдь не механически единообразно, а дифференцированно, при различных темпах и меняющихся в различные периоды центрах тяжести. В настоящий период особенно важной частью этого комплексного процесса является план многосторонних интеграционных мероприятий, предусматривающий по выделенным темам совместные действия, предпринимаемые в общих интересах. Эти совместные действия, естественно, влияют на положение и развитие венгерского народного хозяйства. В данной статье я остановлюсь на некоторых аспектах этого влияния.

Общезвестно, что план многосторонних мероприятий еще очень молод: он был принят на XXIX Сессии СЭВ в 1975 году и вступил в силу в начале текущего пятилетнего периода. Имея дело с новым явлением, важно правильно оценить его роль и значение во всей системе сотрудничества, ибо только таким образом сможем мы использовать кроющиеся в нем возможности.

С венгерской стороны мы видим роль и значение этой новой формы сотрудничества в том, что она способствует более полному удовлетворению в будущем импортных потребностей стран-членов, углубляет процесс международной специализации производства,

— в определенной степени подводя фундамент под многостороннюю систему сотрудничества и расширяя ее, выдвигая на передний план многосторонние связи в народнохозяйственном планировании стран-членов и по ходу выполнения планов;

— обогащая арсенал планового сотрудничества новой формой, расширяющей возможности прогнозирования международных процессов при планировании развития народных хозяйств, одновременно расширяя и возможности координации планов в рамках СЭВ и повышая ее эффективность;

— концентрируя совместные действия на темы особой важности, которые в системе двусторонних связей решаются лишь с трудностями и менее эффективно, этим как бы дополняя и расширяя (но не пытаясь заменить) двусторонние связи;

— позволяя странам-членам включать многосторонние мероприятия в свою хозяйственную практику в соответствии с собственными внутренними системами планирования и управления, избегая тем самым жесткость унифицированных схем и несомненно лучше гарантируя их осуществление.

Эта новая инициатива, по всей вероятности, имеет большое значение для процесса интеграции. Но, как и все новые начинания, ее влияние и эффективность следует еще проверить на практике, а применяемые методы надо будет уточнить или даже изменить, местами расширяя, а кое-где, возможно, ограничивая их применение. Ясно и то, что многосторонние мероприятия должны обрести свое четко определенное место во всей системе сотрудничества; необходимо установить взаимосвязь между этой новой формой и рядом прочих форм сотрудничества.

Новая форма представляет собой существенный шаг вперед в углублении сотрудничества, однако исходные условия ее применения следует считать своеобразными по двум причинам: с одной стороны, долгосрочные экономические планы и программы еще не разработаны, и, стало быть, совместные действия не могут базироваться на них; с другой стороны, международная система экономических рычагов стран-членов СЭВ еще недостаточно эффективно способствует углублению связей интеграционного типа по производству и товарообороту.

Отсутствие надлежащим образом разработанных долгосрочных концепций развития является существенным обстоятельством потому, что задача многосторонних интеграционных мероприятий состоит как раз в обеспечении согласованности долгосрочных экономических процессов на среднюю перспективу — на пятилетний период. Таковы капитальные вложения в отрасли промышленности, производящие сырье и материалы, развитие транспортной сети, научно-техническое сотрудничество, специализация и кооперирование производства. В настоящее время еще не разработан как народнохозяйственный аспект плановой системы долгосрочного развития в рамках СЭВ (ее взаимосвязь с народнохозяйственными планами), так и ее коллективный аспект (составление долгосрочных целевых программ), хотя уже в обеих областях ведется работа по планированию и программированию. Учитывая трудности, вызываемые этим своеобразным обстоятельством, следует считать успехом разработку также и многосторонних мероприятий в рамках координации пятилетних народнохозяйственных планов. Однако будущее этой новой формы тесно связано с перспективным планированием и программированием, и только в увязке с ними может она полностью развернуться.

Для действующей ценовой, кредитной и валютной системы СЭВ характерно, что она сложилась и развивалась, обслуживая двусторонние связи, и лишь условно, в ограниченной степени может способствовать развертыванию многосторонних связей; поэтому она требует дальнейшего существенного совершенствования. Из этого обстоятельства вытекает та специфическая черта плана многосторонних мероприятий, что до сих пор мы могли полностью разработать только натуральную и лишь частично стоимостную сторону осуществляемых в общих интересах капиталовложений, специализации и научного сотрудничества. А ведь предварительное выяснение стоимостной стороны исключительно важно для заинтересованных национальных хозяйств. В дальнейшем надо будет непременно устранить этот недостаток, ведь принцип эффективного планирования и хозяйствования оче-

видно требует одновременного должного знания как натуральной, так и стоимостной стороны процесса воспроизводства. Из недостаточного выяснения стоимостной стороны пока еще вытекает некоторая неопределенность в отношении народнохозяйственных эффектов.

К этому следует еще добавить и внешний фактор неопределенности, связанный с мировым капиталистическим хозяйством. Отсюда, например, такое явление, что совокупные затраты на осуществляемые нами совместные капиталовложения -- отчасти и вследствие значительной доли импорта из капиталистических стран -- как правило, превышают предварительную смету. Это в некоторых случаях требует от заинтересованных национальных хозяйств значительных дополнительных затрат. Таким образом, и при этой форме сотрудничества следует учитывать факторы, связанные с мировым капиталистическим хозяйством, и нельзя исходить из того, что «наш дом -- наша крепость», и что ни к чему считаться нам с существенными воздействиями извне.

Решение указанных важных проблем и преодоление трудностей требуют большого внимания, так как значение новой инициативы сможет полностью проявиться для участвующих стран только тогда, если будут найдены соответствующие решения.

Значительным успехом является то, что в результате приблизительно двухлетней подготовительной работы в 1975 году родился план многосторонних мероприятий, и заинтересованные страны СЭВ -- применяя принцип заинтересованности, заложенный в Комплексной программе, -- смогли включить его в свои пятилетние народнохозяйственные планы. В ходе этого Венгерская Народная Республика полностью включила принятые ею многосторонние обязательства в пятилетний народнохозяйственный план на 1976--80 годы.

Многосторонние мероприятия и венгерское народное хозяйство

Венгерская Народная Республика заявила о всецелой заинтересованности в упомянутых многосторонних мероприятиях. Она участвует, предоставляя кредиты в счет будущих товарных поставок, поставляя оборудование и выполняя различные работы в создании десяти крупных объектов капитального строительства, служащих общим целям. Она также принимает активное участие и в международной специализации и научном кооперировании.

Обязательства венгерской стороны в отношении поставок, а также задачи, связанные с ее фактическим участием в строительстве, почти полностью определены количественными показателями материально-технического характера и зафиксированы соответствующими органами в двусторонних межгосударственных соглашениях. Однако стоимостные отношения пока еще выяснены недостаточно; мы располагаем лишь приблизительными расчетами.

Венгерское народное хозяйство принимает участие в осуществлении многосторонних интеграционных мероприятий товарными поставками и выполнением различных работ в течение пяти лет общей стоимостью почти в 1 миллиард переводных рублей, что по торговому курсу соответствует приблизительно 35 милли-

ардам форинтов. Эта сумма составляет относительно небольшую долю полной сметной стоимости объектов, но по отношению к возможностям накопления в венгерском народном хозяйстве она представляет собой значительную статью. Эта сумма составляет приблизительно 4 процента совокупного объема капиталовложений, запланированных в венгерском народном хозяйстве на пять лет, и свыше 8 процентов централизованного фонда капиталовложений. Естественно, эти инвестиции постепенно окупятся для венгерского народного хозяйства за счет товарных поставок после ввода в действие данных объектов. Таким образом, и венгерская сторона заинтересована в своевременном и качественном выполнении своих обязательств, так как от этого зависит, будет ли она получать в счет компенсации своевременно доброкачественные товары. Именно поэтому добросовестное, точное, хорошее выполнение работ участвующими венгерскими организациями и их работниками является не только моральной обязанностью, но и диктуется нашими собственными экономическими интересами.

Для Венгрии очень важен газ, который в значительных количествах будет поступать по оренбургскому газопроводу. В настоящее время Венгрия импортирует ежегодно 1,7 миллиардов куб. м газа. В результате поступления оренбургского газа объем импорта возрастет к 1980 году до 4,3 миллиардов куб. м. Наше народное хозяйство сможет хорошо использовать этот прирост — уменьшится доля импорта углеводородов из капиталистических стран, расширится сырьевая база для развития эффективных отраслей венгерской химической промышленности. Ввод в действие оренбургского газопровода, по всей вероятности, создает более благоприятные условия для дальнейшего сотрудничества в области энергетики и после 1980 года.

Также очень важно для венгерского народного хозяйства строительство линии электропередачи в 750 киловольт Винница — Альбертирша, к которой подключается расширение 400 киловольтной сети в Венгрии. Из-за относительной ограниченности отечественной базы энергоносителей и высоких издержек производства электроэнергии, Венгрия давно импортирует из Советского Союза электрическую энергию. Строительство новой международной линии передачи позволит надежно увеличить потребление электроэнергии, одновременно повышая стабильность энергоснабжения венгерской энергетической сети и позволяя одновременно подключать к энергетической системе более крупные энергопроизводящие единицы. Строительство международной линии передачи осуществляется на советской территории Советским Союзом, а на собственной территории — заинтересованными странами. В рамках этой работы было заключено соглашение между Чехословакией и Венгрией о том, что Чехословакия в качестве своей доли построит 66 километровый отрезок магистрали на территории Венгрии.

Принимаем мы участие и в совместном строительстве Усть-Илимского целлюлозного комбината, строящегося на базе лесных ресурсов восточной Сибири и гидроэлектростанции, воздвигаемой на Ангаре. Из 500 тысяч тонн продукции комбината Венгрия, начиная с 1980 года, будет получать 40 тысяч тонн целлюлозы в год, что будет покрывать 24 процента общей годовой потребности в импорте. В результате этого углубится специализация целлюлозно-бумажной промышленности между Советским Союзом и Венгрией, на основе которой венгерское производ-

ство будет в значительной степени сосредотачиваться на легких видах бумаги, а тяжелые виды будут поставляться из СССР.

В строительстве Киембаевского асбестно-обогачительного комбината Венгрия принимает участие поставками машин и оборудования, транспортных средств и товаров народного потребления. В счет этого поставки асбеста в Венгрию постепенно возрастают и после 1980 года достигнут 2,5 тысячи тонн, а позднее — 3 тысячи тонн в год.

Чтобы развиваться, венгерское народное хозяйство не может обойтись без постоянного увеличения импорта промышленного сырья, так как отечественным производством покрывается лишь часть потребности нашей промышленности в сырье. Венгрия в значительном количестве ввозит промышленное сырье и материалы как из социалистических, так и из капиталистических стран. Такого будет, по всей вероятности, положение и в будущем. В настоящее время ситуация характеризуется тем, что в 1975 году 57 процентов общего импорта из социалистических стран, осуществляемого за переводные рубли, составляли материалы, энергия и полуфабрикаты; эти же товары в импорте из несоциалистических стран составляли 64 процента. Из всего этого следует исключительная важность постепенного снижения материалоемкости венгерского народного хозяйства. Мы должны создать такую структуру промышленного производства и экспорта, для которой характерен прежде всего более быстрый рост добавленной стоимости при меньшей материалоемкости. Этим соображением руководствуемся мы при участии в международной специализации и кооперировании производства, ища решения, отвечающие нашим условиям и полезные также странам-партнерам.

В плане многосторонних мероприятий важное место отводится специализации и кооперированию производства в особенно важных областях. Из девяти мероприятий, предусмотренных в многостороннем плане, Венгрия принимает участие в пяти значительных мероприятиях по специализации и кооперированию производства. Такими являются создание новых мощностей по производству химических средств защиты растений, участие в производстве оборудования для атомных электростанций, кооперирование в производстве легковых автомобилей ВАЗ, разделение производства электронно-вычислительных машин, а также специализация и кооперирование в производстве шарикоподшипников.

Нынешний этап развития сотрудничества по специализации и кооперированию производства в наших странах характеризуется тем, что создание совершенно новых видов продукции и производственных мощностей происходит легче и быстрее, в то время как координация эксплуатации уже действующих производственных мощностей продвигается относительно медленными темпами, местами — с трудом. Международная специализация замедляется тем, что свертывание производства продукции, не отвечающей современному уровню или же имеющей меньший спрос, и, с другой стороны, перестановка мощностей на производство новых видов продукции, пользующихся спросом, происходит медленнее, чем следовало бы. Это объясняется, по-видимому, тем, что в настоящее время инициаторами процесса специализации и кооперирования производства выступают еще большей частью государственные органы, которые одновременно и управляют этим процессом, и недостаточно проявляется самостоятельность предприятий.

Углублению разделения труда препятствует и то, что хозяйственные механизмы, порядок планирования и финансового регулирования в странах-членах СЭВ лишь слабо побуждают предприятия к более быстрому и широкому развертыванию международной специализации и кооперирования производства. Этот факт вместе с тем указывает и на одно из важнейших направлений дальнейшего совершенствования сотрудничества в рамках СЭВ.

Наибольшее число соглашений по специализации и кооперированию производства Венгрия заключает со странами-членами СЭВ, но там, где это отвечает нашим интересам, развивается сотрудничество и с капиталистическими фирмами. Наибольшую роль специализация и кооперирование производства играет в наших экономических связях с Советским Союзом. Согласно соглашениям, уже заключенным на 1976—1980 годы, удельный вес специализированной продукции составит в венгерском экспорте машин и оборудования в СССР 64 процента, а в венгерском импорте машин и оборудования из СССР — 46 процентов. Поставки в рамках кооперирования производства деталей и узлов составляют 14 процентов венгерского экспорта машин в СССР и 12 процентов советского экспорта машин в нашу страну. Все это еще далеко не означает должного использования взаимовыгодных возможностей специализации и кооперирования производства. В этой области еще имеются большие возможности, и многое следует еще сделать.

Наше участие в разделении производства оборудования для атомных электростанций очень важно и с точки зрения технического развития венгерской промышленности — и поэтому мы охотно и с радостью участвуем в нем. Мы сильно заинтересованы в том, чтобы венгерское энергетическое машиностроение и приборостроение хорошо использовали свои производственные возможности в рамках развития атомноэнергетического машиностроения на базе широкого сотрудничества стран-членов СЭВ.

Специализация в производстве химических средств защиты растений также является полезным делом, и в ней Венгрия принимает активное участие. В этой области в Венгрии уже имеются значительные интеллектуальные ресурсы, существенными являются и наши технические связи с иностранными партнерами — все это может использоваться в сотрудничестве со странами-членами СЭВ.

В сотрудничестве по производству шарикоподшипников наша страна принимает участие с самого начала. Сотрудничество в этой области мы считаем успешным. Включение этой темы сессией Совета Экономической Взаимопомощи в число особо важных мероприятий по специализации было правильным и обоснованным, ведь дальнейшее углубление специализации — важное условие лучшего удовлетворения потребностей стран-членов СЭВ в шарикоподшипниках.

Средства электронно-вычислительной техники относятся с точки зрения технического развития к прогрессивным видам продукции — в их специализированном производстве Венгрия также принимает активное участие.

Значительной областью специализации для нас является производство автоматических и телемеханических систем для нефте- и газопроводов; в этой области мы считаем важной задачей развитие комплексных подсистем и начало их выпуска.

В кооперировании по производству автомашин ВАЗ Венгрия заинтересована и сегодня, и в будущем. В этой программе сотрудничества участвует несколько

венгерских предприятий; поставляемые ими в СССР серии деталей и узлов насчитывают триста-четыре тысячи штук и благодаря этой кооперации покрывается подавляющая часть потребности Венгрии в импорте легковых машин.

Выделенные темы производственного сотрудничества уже и сами по себе значительны. Их значение еще более усиливается их вторичным эффектом, оказываемым на развитие промышленности стран-членов СЭВ. Кроме того, они могут рассматриваться как показательные примеры сотрудничества, предоставляя хорошо используемый опыт для дальнейшего совершенствования системы сотрудничества в области специализации и кооперирования производства.

За последние годы в специализации и кооперировании производства наблюдался несомненный прогресс, но мы еще не достигли желаемого уровня. Что касается, например, Венгрии, то в настоящее время доля специализированной продукции в экспорте деталей и узлов в страны-члены СЭВ составляет 16–18 процентов, а в экспорте в западные страны — всего лишь 4–5 процентов. Если эти данные сопоставить с тем, что в странах «Общего рынка» (по расчетным данным) доля специализированной продукции в экспорте деталей и узлов достигает 40–50 процентов, то становится очевидным, что в области специализации следует добиваться дальнейших сдвигов. Залога более быстрого продвижения вперед в этой области следует искать, по всей вероятности, не среди юридических инструментов, а в углублении взаимной экономической заинтересованности (на уровне государств и предприятий).

Выполнение плана многосторонних интеграционных мероприятий в Венгрии

Выполнением плана многосторонних мероприятий — вместе с выполнением пятилетнего плана — в нашей стране руководит Совет Министров, через компетентные министерства и государственные органы. Согласно решению правительства, выполнение задач, вытекающих из совместных мероприятий, должно происходить в соответствии с общим порядком действующей системы хозяйственного управления, используя рычаги этой системы. Действующая в Венгрии система хозяйственного управления оказалась подходящей и с точки зрения выполнения международных обязательств; в принятии чрезвычайных мер нет необходимости.

В соответствии с этим выполнение производственных обязательств следует обеспечивать в общем порядке управления производством: проблемы труда и рабочей силы должны решаться мерами регулирования использования трудовых ресурсов; задачи по обеспечению финансовых средств — мерами финансового управления; задачи по экспорту и импорту — мерами управления внешней торговли. О выполнении задач по научно-техническому сотрудничеству заботится Государственный комитет по техническому развитию.

В задачи отраслевых министерств входит контроль и надзор над подготовкой предприятий, участвующих в сотрудничестве, к выполнению обязательств. Министерства должны обеспечить, чтобы среднесрочные планы предприятий содержали задачи, связанные с международным сотрудничеством и чтобы они своевременно выполнялись.

Министерство внешней торговли осуществляет деятельность по координации, управлению и организации выполнения взаимных товарных поставок, связанных с многосторонними мероприятиями. Оно заботится о том, чтобы обязательства были включены в долгосрочные и годовые межгосударственные соглашения, чтобы предприятия во-время заключали договора о поставках; постоянно следит за выполнением обязательств как по экспорту, так и по импорту.

В Венгрии в рамках общего порядка хозяйственного управления лишь в одном случае пришлось прибегнуть к разработке специального метода. В интересах выполнения задач венгерской стороны, связанных с совместным строительством оренбургского газопровода, Советом Министров — ввиду большого числа участвующих в сотрудничестве органов — была создана общегосударственная координационная комиссия, в задачи которой входит отчасти осуществление контроля, отчасти же координация оперативных действий.

Регулярно производится оценка практического опыта, накапливающегося по ходу осуществления мероприятий, так как с учетом этого будет совершенствовать порядок и методы реализации таких мероприятий в будущем.

Направление будущего развития

В последующие годы очевидно будет накоплен большой опыт в области многосторонних мероприятий, методов их осуществления. В определенных аспектах уже сейчас можно предвидеть требуемое направление развития. В связи с этим возникают следующие соображения:

— План многосторонних согласованных мероприятий в будущем, вероятно, надо будет увязывать с долгосрочными целевыми программами, а также с долгосрочными народнохозяйственными планами. Именно поэтому необходимо разработать эффективную систему связей между ними.

— В плане многосторонних мероприятий и в будущем надо будет согласовывать два аспекта. Одним из них является воплощенное в долгосрочных целевых программах стремление к достижению отраслевого или подотраслевого *коллективного оптимума* в производстве и удовлетворении потребностей; другим же — стремление к достижению оптимума производства и удовлетворения потребностей в участвующих *народных хозяйствах*. Согласовать эти два оптимума, по-видимому, можно на основе итерации таким образом, чтобы ни один из них не подчинялся другому, а оба воздействовали бы друг на друга.

— Как эффективность планирования, так и успешность выполнения планов требуют дальнейшего развития товарно-денежных отношений в международном сотрудничестве стран-членов СЭВ, включая политику цен, методы внешней торговли, валютно-кредитные системы. Так как планирование стоимостных процессов — неотъемлемая часть всей системы сотрудничества, совершенствование товарно-денежных отношений становится ключевым вопросом углубления сотрудничества.

С точки зрения отдельных народных хозяйств следует изучить и установить, в какой мере способны они в рамках своих возможностей накопления и инвестиционной деятельности принимать участие в международных инвестиционных про-

цессах, чтобы в результате этого участия развитие производительных сил народного хозяйства не замедлялось, а как раз, наоборот, получало бы для этого дополнительные ресурсы. Очевидно, что и в этой области имеется оптимум; достигнуть его — желательно, выходить за его пределы — не рекомендуется.

План многосторонних интеграционных мероприятий может стать одним из существенных факторов в прогрессе процесса интеграции. Для того, чтобы эта возможность претворилась в жизнь, необходимы взаимные усилия, систематический анализ накапливающегося опыта и учет соответствующих выводов участвующими странами-членами — как в отдельности, так и сообща.

EFFECT OF THE MANYSIDED CMEA INTEGRATION MEASURES
ON THE HUNGARIAN ECONOMY IN 1976-1980

R. NYERS

The importance of the new form of cooperation mentioned in the title consists in that it promotes a better future satisfaction of the import needs of member countries in several ways, deepens the process on international specialization in production. The possibilities inherent in it can be utilized only if its role and importance in the system of cooperation are judged correctly. Its effect and efficiency must be checked, its methods rendered more exact or, if necessary, modified. The starting circumstances of the new form are particular for two reasons: on the one hand, the joint actions cannot yet be based on the long-term economic plans and, on the other hand, the system of economic tools of the CMEA countries does not yet help the deepening of the integrational production and commodity turnover relations efficiently enough.

Since the present price, credit and monetary systems of the CMEA were born with a view to bilateral relationships, and developed accordingly, they require essential improvements. At present, namely, only the physical aspects of the many-sided plan of measures could be elaborated, the value aspects only partially, though a previous clarification of the latter is highly important for those interested. This deficiency must be by all means eliminated in the future.

The multilateral commitments undertaken were built into Hungary's current five-year plan without fail. These are embodied in commodities and performances amounting to almost one billion transferable rubles and, in view of Hungary's accumulation possibilities, this is an important item.

In the second part of the article the author discusses the specialization and cooperation occupying an important place in the plan of multilateral measures. He characterizes them by stating that these are successful in respect of new products and the creation of new capacities, but harmonization of existing productive capacities proceeds with difficulties. A deepening of the division of labour is hindered by the fact that the economic mechanisms stimulate little the enterprises to develop specialization and cooperation relations of Hungary the author points out that this important kind of cooperation underwent much development, yet it has not attained the desirable level. It plays a much smaller role still than e.g. in the cooperation among the Common Market countries.

The author outlines in conclusion the desirable directions of future development. He stresses that, since the planning of value processes is an indispensable part of the system of cooperation, improvement of the commodity and monetary relations becomes a pivotal problem of deepening cooperation. He states that participation of the individual countries in international investments is desirable to such extent as not to slacken the development of the productive forces of their economies; on the contrary, participation must secure additional resources for them. It is desirable to attain in this field the optimum, but it is not advisable to pass beyond.

И. ФРИШ

О ЗАКОНОМЕРНОСТЯХ СОТРУДНИЧЕСТВА СТРАН-ЧЛЕНОВ СЭВ*

Автор считает, что на основе существующей практики сотрудничества стран СЭВ нельзя выводить каких-либо закономерностей развития мирового социалистического хозяйства будущего, но, тем не менее, история почти трех десятилетий деятельности СЭВ позволяет сделать ряд закономерных выводов о путях и методах развития экономического сотрудничества стран СЭВ.

Законы развития мирового социалистического хозяйства

Из темы моего доклада следует, что я должен, хотя бы вкратце, остановиться на некоторых аспектах законов развития мирового социалистического хозяйства. В первую очередь необходимо выяснить сферу влияния, область действия этих законов. В работах, посвященных социалистической экономической интеграции, нередко распространяют на развитие всего человечества закономерности, выведенные из взаимосвязей наблюдаемых в содружестве стран СЭВ процессов (явлений). Такое обобщение недопустимо даже в том случае, если эти закономерности дополняются некоторыми высказываниями наших классиков, иногда определенными предварительными соображениями или теоретическими положениями о превосходстве социализма над капитализмом. Дело не во том, что на основе практики стран СЭВ нельзя делать выводов о важных законах, закономерностях развития социалистической экономики. В деятельности намного меньших хозяйственных единиц также реализуются важные законы, и среди них такие, которые характерны для гораздо более крупных единиц или даже для всего содружества. Однако экономические законы, как известно, являются тенденциями развития, вытекающими (возникающими, следующими) из часто встречающихся (повторяющихся) определенных объективных взаимосвязей экономических процессов, могущими существовать параллельно, ослабляя или усиливая друг друга. Разумеется, можно сказать и то, что законы социалистической экономики в совокупности составляют систему экономических законов социализма. Однако из этого пока мало что следует в отношении системы этих законов. Нам неизвестны такие результаты научных изысканий, которые подтвердили бы воззрение, что экономические законы образуют жесткую систему, в которой господствуют отношения строгой субординации. Но взаимосвязи, вытекающие из условий стран СЭВ, не обязательно повторяются в далеких по времени и пространству социалистических странах, обладающих иными масштабами и иной степенью развития. Поэтому в отношении

* Доклад на международной научной конференции «Сущность и историческое место социалистической экономической интеграции в развитии мирового социалистического хозяйства», организованной Международным институтом экономических проблем мировой социалистической системы СЭВ в Москве 15–18 марта 1977 г.

каждого выявленного или раскрытого закона, закономерности необходимо тщательно изучать и взвешивать пределы его действия. Чем больше сфера и чем длиннее перспектива действия, которая вменяется законам, «установленным» на узкой базе или умозрительным путем, тем больше опасность промахов. В отношении будущего неоднократно ошибались и наши классики. Например, в том, что социализм сперва победит в странах, экономически более развитых, что он победит одновременно в самых развитых странах, что с обобществлением средств производства упразднится товарное производство. Поэтому не следует пытаться на основе нынешнего опыта СЭВ предписывать пути развития человеческого общества на предстоящие десятилетия. Ведь этим подразумевалось бы, что будущие судьбы, действия, национальные и международные битвы всей той части человечества, не входящей в СЭВ, которая составляет ее девять десятых, десятилетиями не будут влиять на историю мира, и что развитие в ближайшие десятилетия науки, техники, производительных сил не сможет внести в эту историю качественно новых элементов, которых мы не видели и не могли предвидеть.

Можно ли из анализа опыта сотрудничества стран-членов СЭВ выводить основные законы развития мирового социалистического хозяйства? Можно, при учете определенных условий (ограничений). Нам не следует забывать о некоторых основных фактах, ограничивающих наши заключения. Во-первых, о сфере наблюдаемых процессов, на основе взаимосвязей которых делаются выводы. Сегодня сотрудничество СЭВ распространяется всего на девять стран и во многих областях — на Югославию. Мировое социалистическое хозяйство уже сегодня намного больше этого, и, по многим признакам, оно растет. Необходимо учитывать и уровни экономического развития, при которых наблюдаемые процессы протекают. Из девяти стран семь — индустриально-аграрные или развитые индустриальные страны (численность населения которых составляет более чем 97 процентов общей численности населения стран СЭВ), а остальные две страны находятся на более низкой ступени экономического развития и существенно отличаются друг от друга и от других стран. На ход экономических событий, на действие экономических законов могут оказать существенное влияние неожиданные события международной и внутренней политической жизни, изменение условий на мировом рынке, стихийные бедствия. Их влияние необходимо по возможности исключить, но, как правило, сделать это довольно трудно. Существенным обстоятельством является поэтому то, что все изученное и изучаемое сотрудничество приходилось на период без войн, для которого в целом характерен переход от холодной войны к разрядке. Страны СЭВ неоднократно терпели стихийные бедствия (наводнения, землетрясения), но экономическому потенциалу пострадавших стран наносился ущерб лишь временного характера. То же самое можно сказать о некоторых политико-общественных неурядицах, например, о контрреволюции в Венгрии. Отнюдь не безразлична с точки зрения справедливости выводов и продолжительность периода, из опыта которого делается вывод. Период времени, который можно анализировать, составляет для большинства стран 28 лет, для Монголии — 15, Кубы — 5 лет, а для отдельных частных процессов, как правило, только несколько лет. Делая на основе опыта нашего сотрудничества выводы о законах мирового социалистического хозяйства, мы должны все это иметь в виду и, лишь

учитывая все это, должны мы судить о том, действительны ли наши выводы и в какой мере, зависят ли они от упомянутых выше условий или нет.

Мы можем нередко наблюдать развертывание противоречивых, противодействующих друг другу процессов, взаимосвязей, закономерностей. Это и не удивительно, ведь, как известно, именно поэтому экономические законы имеют характер тенденций. В основе всякого развития лежат противоречия, коллизии, их разрешение, возникновение новых противоречий. Совершенно гладкого, лишено противоречий развития не бывает. Имеем ли мы в виду отдельные страны СЭВ или СЭВ в целом, ясно, что их экономическое развитие никогда не было свободно от проблем и трудностей. Эти проблемы решались, но за ними всегда появлялись новые проблемы, новые трудности. Развитие в общем всегда было поступательное, оно сопровождалось ростом благосостояния, повышением материального и культурного уровня жизни народа, но временами происходило окольным путем. Из этого следует сделать два вывода. 1. Постоянное развитие, рост и обогащение производительных сил, и вместе с тем постоянное повышение благосостояния и культурного уровня населения является основным законом экономического развития как отдельных стран-членов СЭВ, так и содружества СЭВ в целом. Очевидно, что этот закон действует также и в мировом социалистическом хозяйстве. 2. Однако и этот закон действует не сам по себе, без противоречий, действие и этого закона, как, вообще, действие экономических законов, можно и облегчить, ускорить, и можно мешать ему, замедлять его действие и препятствовать ему. Самой благородной задачей общественных наук социалистических стран и, в первую очередь, экономических наук, является содействие и ускорение действия закона роста производительных сил и благосостояния общества путем выяснения системы требований действия этого закона.

Развитие сотрудничества стран СЭВ

Очевидным, всеобщим и распространяющимся также и на мировое социалистическое хозяйство законом является постоянное расширение и углубление, усиление многосторонности, многообразия сотрудничества стран СЭВ, распространение его на все новые участки общественного хозяйства, приумножение, развитие и постепенное совершенствование применяемых форм сотрудничества, установление и постепенное развитие правовых и организационных рамок сотрудничества.

Невозможно отразить на полосах одной статьи и даже на страницах одной книги все или только наиболее важные моменты этого развития. Мы должны ограничиться лишь беглым обзором важнейших процессов, достижений, подтверждая этим наши положения. Сотрудничество, естественно, началось с развития внешней торговли. Внешняя торговля долгое время была безусловно наиболее важной, всеобъемлющей областью сотрудничества. Став важнейшими партнерами друг друга во внешней торговле, — хотя до этого они поддерживали лишь незначительные контакты, — страны СЭВ стали постепенно учитывать в структуре своего производства взаимные потребности. Хотя внешняя торговля давно потеряла свою единовластную роль, она и поныне является одной из самых важных областей сотрудничества.

Очень быстро приобрело значительную роль и научно-техническое сотрудничество стран-членов СЭВ. Вначале это означало в основном научно-техническую помощь Советского Союза. Позже активно смогли включиться и другие страны СЭВ, и сегодня в большинстве стран СЭВ научно-техническое сотрудничество имеет широкую и прочную базу. Рано началось установление контактов и в разных областях производства. В первой половине пятидесятых годов началось объединение энергосистем отдельных стран-членов СЭВ. Из этого возникла охватывающая все европейские страны СЭВ объединенная электроэнергетическая система с диспетчерским центром в Праге. Было заключено много соглашений о взаимопомощи в снабжении различными видами сырья, алюминием, искусственными материалами, минеральными удобрениями, прокатом. Исключительно важной и все более значительной формой сотрудничества является специализация и кооперирование производства. Она началась с относительно простой специализации в машиностроении, достигла таких форм, как создание единой системы ЭВМ или современная, крупномасштабная специализация в нефтехимии; однако в этой области еще имеются огромные неиспользованные резервы. Наряду с объединением электроэнергетических систем началось строительство гигантской системы трубопроводов, транспортирующих нефть и газ между странами. В первой половине 60-ых годов была уже построена первая нитка нефтепровода «Дружба» длиной более 4500 км. Были созданы совместные предприятия, организации, объединения, выполняющие отчасти производственные, отчасти совместные проектные, организационные, хозяйственные задачи, такие, как «Хальдекс», «Агромаш», «Интертрансмаш», «Интерметалл», «Интертекстильмаш», «Интератомэнерго», «Интерхим», «Интератоминструмент» и другие. Также к началу 60-ых годов восходит создание Общего парка грузовых вагонов. Развитию производственного сотрудничества служило учреждение Института по стандартизации. Сотрудничество распространилось также и на область финансов — значительным событием явилось учреждение в 1963 году Международного банка экономического сотрудничества для осуществления расчетов между странами и создание в 1970 году Международного инвестиционного банка для содействия финансированию таких капиталовложений, в которых заинтересовано несколько стран СЭВ. Большое значение приобрело особенно в последние годы совместное осуществление капитальных вложений, то есть участие нескольких заинтересованных стран в строительстве крупных объектов, служащих в основном для производства сырья. Эти и не упомянутые здесь другие формы сотрудничества не могли бы развернуться без создания соответствующей широкой сети организаций СЭВ.

Все это — изложенное лишь в общих чертах — развитие можно понимать как необходимый элемент развития производительных сил и тем самым интернационализации процессов производства и обращения. При таком понимании история СЭВ является историей развития производительных сил или продуктом этого развития. Однако это отнюдь не полностью соответствует истине. Ведь создание СЭВ было не результатом, а предпосылкой всего развития — экономической смычкой социалистических государств, вытекающей их социалистических принципов, сознательным вмешательством в ход экономики, решением и акцией экономической политики в интересах ускорения развития. Коммунистические и рабочие

партии стран СЭВ продолжали и развивали в последующие годы эту линию экономической политики, в частности, и тогда, когда их представители в 1962 году приняли разработанные в рамках СЭВ «Основные принципы международного социалистического разделения труда». Характерна цель этого хозяйственно-политического курса: «создание многоотраслевой структуры народного хозяйства социалистических стран, сочетающей в оптимальном комплексе промышленность и сельское хозяйство, добывающие и перерабатывающие отрасли, производство средств производства и производство предметов потребления и способствующей повышению темпов и эффективности их экономического развития». Еще два положения для характеристики экономической политики, зафиксированной и в «Основных принципах»: «главным средством планомерного углубления международного социалистического разделения труда и все более тесного объединения производственных усилий стран социализма на современном этапе является координация национальных народнохозяйственных планов». Далее: «международное социалистическое разделение труда строится с учетом всемирного разделения труда». Эти принципы экономической политики выдержали испытание временем за десятилетие, прошедшее после принятия «Основных принципов» и свидетельствовавшее о бурном развитии сотрудничества. В 1971 году XXV сессия СЭВ приняла Комплексную программу сроком на 15–20 лет, поднявшую сотрудничество на более высокую ступень, однако в ней также повторяется, что «международное социалистическое разделение труда строится с учетом всемирного разделения труда», и координация планов считается основным методом сотрудничества.

Постоянное расширение и углубление сотрудничества стран СЭВ мы называли выше общедействующим законом. Можно было считать вероятным, что внутри этого движения закономерным образом и в течение относительно длительного периода на первый план будет выдвигаться то одна, то другая форма сотрудничества. По крайней мере, на первой стадии безраздельно господствовала внешняя торговля. Однако позднее такая закономерность уже не прослеживается. Мы наблюдаем все растущее число различных форм, существующих параллельно друг другу, отчасти дополняющих друг друга, но ни одна из них не стоит продолжительное время на переднем плане. Только координация планов претендует уже свыше полутора десятилетия на роль главного метода планомерного разделения труда и сотрудничества. Это, очевидно, отражает стремление социалистических государств в области экономической политики ко все большему включению каждой формы, области и метода сотрудничества в систему своих плановых хозяйств, к превращению их в органическую часть своих плановых хозяйств и всего развития.

Развитие форм сотрудничества

Однако в ходе развития не остаются неизменными — как это можно в определенной мере заключить уже из вышесказанного — и формы сотрудничества с идентичным названием. Ни внешнеторговое, ни научно-техническое сотрудничество, ни специализация и кооперирование, ни, конечно, координация планов —

не те, что были раньше. Из множества этих изменений достаточно отметить только некоторые самые важные из них и отнюдь не для выявления какой-либо закономерности, — здесь закономерность вытекает из сущности совокупного процесса, то есть из все большего расширения, углубления, разветвления сотрудничества, — а чтобы ощутить меру и качество изменений.

В отношении внешней торговли можно говорить об изменении ее функций, ведь до середины 50-ых годов подавляющая часть деятельности СЭВ заключалась в развитии торговли между странами-членами. Вначале заключались годовичные внешнеторговые соглашения, позднее перешли к соглашениям на более длительные сроки, и, начиная с 1961 года, срок их действия совпадает с периодами действия народнохозяйственных планов стран. Объем внешнеторгового оборота стран СЭВ рос намного быстрее, чем национальный доход стран-членов. Внешняя торговля постепенно стала основной формой координации планов, точнее — координация планов состояла в первую очередь из установления обязательств по взаимным поставкам, вытекающих из народнохозяйственных планов. По мере изменения в ходе экономического развития структуры производства стран-членов изменилась — конечно, не в тех же пропорциях — и товарная структура внешней торговли, и в ней все большее место занимают машины, оборудование и товары народного потребления. С изменением организации народного хозяйства стран, с возникновением более крупных хозяйственных единиц, объединений, имеющих большие права, повысилась роль промышленности, производственных предприятий в заключении внешнеторговых сделок. В развитии внешнеторговых связей значительную роль сыграли цены, фиксируемые в соглашениях на относительно длительные периоды. Вначале — до 1951 года — ценами в торговом обороте СЭВ служили цены мирового рынка. А какие иные цены можно было бы применять? Однако, когда в связи с корейской войной и различными спекуляциями цены мирового рынка сильно подскочили, страны-члены СЭВ решили не подвергать свои плановые хозяйства колебаниям цен мирового рынка. Цены во взаимном обороте были зафиксированы на уровне мировых цен 1949 года — первого полугодия 1950 года. Всеобщий принцип регулирования цен был принят на IX (бухарестской) сессии СЭВ в 1958 году. За основу были приняты цены мирового рынка, очищенные от конъюнктурных и монополистических эффектов, при этом изменения цен допускались — хотя, скорее, считались исключением, — особенно в рамках одного пятилетнего планового периода. На практике цены были более жесткими, чем это следовало из принципа. Такое положение мешало преобразованию и взаимной увязке структур. Только после чрезвычайных сдвигов цен и их пропорций на мировом рынке перешли страны СЭВ в 1975 году к ежегодному пересмотру своих внешнеторговых цен.

Успешно развивалось и научно-техническое сотрудничество. Как я уже отметил, вначале оно означало в основном научно-техническую помощь Советского Союза. В 1949 году небольшие страны СЭВ едва завершили или только завершали восстановление ущерба, причиненного войной, лишь некоторые из них обладали широкой и развитой научно-технической базой и высоким техническим уровнем производства в ряде отраслей производства. Только в СССР велось производство почти во всех отраслях на высоком уровне и опиралось на широкий фронт научно-

технических исследований и на большое число ученых. После же создания СЭВ и малые страны СЭВ, прочно базируясь на помощи Советского Союза, сравнительно быстрыми темпами создали свою сеть научно-исследовательских институтов и развернули свое собственное производство на базе передовой техники. Начиная с 1957 года все шире становилось сотрудничество между научно-исследовательскими и проектно-конструкторскими организациями стран-членов и все чаще практиковались между ними консультации о научно-техническом развитии, налаживались совместные исследования. Число последних быстро росло и составило уже несколько тысяч. Как раз этот количественный рост сделал исключительно важным развитие научно-технического сотрудничества, его перерастание в широкую специализацию и кооперирование. Хотя научно-технические потенциалы стран-членов росли быстрыми темпами, не менее быстрыми темпами росли потребности научно-исследовательских исследований и производства во все более крупных и дорогих машинах и приборах, исключительно дорогостоящем производственном оборудовании, а также в ученых и специалистах. Во избежание распыления научно-технических исследований и для лучшего использования их результатов на практике необходима усиленная концентрация и специализация научно-исследовательских тем, объединение и ориентация ученых и специалистов на большие темы. Не менее важно установить должную связь между научно-технической деятельностью, проектированием и производством. Поэтому Постоянная Комиссия по координации научных и технических исследований — которая наряду с подчиняющимся непосредственно Исполнительному Комитету СЭВ Комиссии по сотрудничеству в области плановой деятельности в наиболее широком плане занималась вопросами сотрудничества — в 1971 году была реорганизована в подчиняющуюся также непосредственно Исполнительному Комитету СЭВ Комиссию по научно-техническому сотрудничеству. Между тем круг задач по сотрудничеству вышел и за рамки СЭВ. На передний план выдвинулись такие проблемы, которые подлежат решению в более широком, чем СЭВ, кругу, потому что по-настоящему их можно решить только в международных масштабах — как охрана природы и окружающей среды, включая вопрос о чистоте рек, морей и океанов, задачу обеспечения на длительную перспективу сырьем и энергией, задачу удовлетворения потребностей населения мира в продовольствии. Таким образом, эта форма сотрудничества проделала большое количественное и качественное развитие.

Я уже отмечал, что из различных форм сотрудничества основным методом своего сотрудничества уже свыше 15 лет страны-члены считают координацию планов. Однако заявления стран-членов по этому вопросу отражали, скорее, намерения, чем их осуществление. Отчасти уже и координация планов на 1956—1960 гг. ставила такие цели — например, максимальное использование новых производственных мощностей, устранение диспропорций между производственными мощностями и сырьевой базой, — которые удалось выполнить только частично и постепенно. Вначале и планирование не стояло в каждой стране на таком уровне, который обеспечил бы достижение этих целей. В ходе этой координации впервые были построены балансы ресурсов и потребностей по наиболее важным видам продукции, и впервые было выдвинуто предложение о согласовании планов капиталовложений. Значительным шагом вперед было предложение, высказанное в

1957 году о согласовании перспективных планов важнейших отраслей народных хозяйств на 10—15 лет. Рост масштабов и задач народных хозяйств все более выдвигал на передний план задачи, выходящие за рамки пятилетнего периода, и из этого явствовало, что координация народнохозяйственных планов может быть действительно эффективной, если она опирается на 15—20-летнюю перспективу важнейших задач. Это особенно ярко отражается в Комплексной программе, принятой в 1971 году, которая в области плановой деятельности среди основных направлений указывает на разработку прогнозов по важнейшим областям экономики, науки и техники и координацию планов на длительную перспективу по важнейшим отраслям народного хозяйства и видам производства. Наряду с этим в Комплексной программе, как известно, важное место занимают взаимные консультации об основных вопросах экономической политики. А они в основном касаются основных целей и задач, связанных с перспективным планированием.

В какой мере правомерно говорить в связи с действующими в сотрудничестве стран СЭВ законами о законах мирового социалистического хозяйства? Суммарно мы можем сказать, что во всех вышеуказанных областях сотрудничества закономерно действовал закон, касающийся развития СЭВ в целом. Сотрудничество все более росло вширь, вглубь, становилось многосторонним и все более эффективным, с той общедействительной оговоркой, что развитие обычно происходит не совсем прямолинейно и не свободно от окольных путей или временных спадов. Вместе с тем мы получили также наглядное свидетельство о том, что развитие форм сотрудничества тесно связано с общим развитием, зависит от уровня развития производительных сил и производственных отношений стран, и развитие каждой отдельной формы происходит во взаимосвязи с остальными формами. Из этого, однако, следует, что положение, которое имеет силу для стран, находящихся на более высоком уровне индустриального развития, не обязательно действительно для стран аграрно-индустриального характера или для Монголии, находящейся на более низком уровне экономического развития. С учетом этого следует нам сосредоточить наше внимание на законах, действующих в странах СЭВ и не пытаться любой ценой распространить их действие на мировое социалистическое хозяйство. Все это применимо — *mutatis mutandis* — в отношении стран мирового социалистического хозяйства, не входящих в СЭВ, а также всех таких стран, которые в будущем будут увеличивать число стран мирового социалистического хозяйства. Дальнейшие модификации вызовут все те изменения, которые бурут вытекать из изменения и роста состава целого по отношению к составляющим его частям.

Производительные силы и производственные отношения

Философы лишь различным образом *объясняли* мир, но дело заключается в том, чтобы *изменить* его. Это является основной задачей и ученых, исследующих законы мирового социалистического хозяйства. Они должны указать и на то, — и в этом отношении мы можем многому поучиться на опыте сотрудничества стран СЭВ, — каких взаимосвязей, законов не следует упускать из виду, т.к. в против-

ном случае это может воспрепятствовать, затруднить, затормозить, задержать развитие социалистического общества и мирового социалистического хозяйства.

Едва ли не со времени создания СЭВ занимает участников этой организации и всех, заинтересованных в экономическом сотрудничестве социалистических стран мысль о том, каков возможный эффект взаимного сотрудничества двух стран и каков — многостороннего сотрудничества, охватывающего нескольких или всех членов СЭВ. Не трудно было показать, что многостороннее сотрудничество можно считать более полезным, ведь оно позволяет при возникновении какого-нибудь дефицита в одной стране восполнить его из второй или третьей, а, может быть, и четвертой страны, и, наоборот, если в одной стране появляется какой-нибудь избыток, то его может использовать какая-нибудь из стран-членов. Однако более углубленные исследования уже в этом начальном периоде показали, что возможности многостороннего сотрудничества внутри СЭВ ограничены весьма узким кругом. В разных областях, так, например, в области внешней торговли, финансов, создания совместных предприятий, научно-технического сотрудничества вопрос о многосторонности и поныне стоит на повестке дня и — несмотря на некоторые сдвиги — не решен. Очевидно, что его решение могло бы продвинуть вперед, ускорить экономическое сотрудничество. В чем же кроется причина нерешенности этой проблемы уже в течение почти трех десятилетий?

Как обычно при крупных вопросах, и здесь нельзя ответ сводить к одной взаимосвязи, к одной единственной трудности. Однако уже первые исследования указали на трудности, вытекающие непосредственно из системы планирования затронутых социалистических стран. С тех пор в каждой социалистической стране народнохозяйственное планирование проделало большое развитие, однако, препятствий многостороннему сотрудничеству, вытекающих из системы планирования, и по сегодняшний день устранить не удалось. Исследователи данной проблемы по существу столкнулись с тем фактом, что сильно централизованная система народнохозяйственного планирования, сложившаяся в конце сороковых — начале пятидесятых годов, в самом плане распоряжалась о потреблении всех произведенных в процессе воспроизводства продуктов. Излишки не планировались, они могли образоваться лишь в том случае, если в какой-нибудь производственной единице или отрасли производства план перевыполнялся или недовыполнялся, потому что какая-то другая производственная единица или отрасль производства не справилась с поставкой продукции, необходимой для выполнения плана. Таким образом, для того, чтобы две страны могли поставлять свою продукцию друг другу, производство поставляемой продукции необходимо было запланировать заранее. Для двух стран это требование можно было выполнить относительно легко, хотя оно потребовало такого сотрудничества в области планирования, которое в это время было неизвестным. В случае трех или больше стран понадобилось бы гораздо более сложное сотрудничество в области планирования, которое в пятидесятых годах оказалось невозможным. Ведь для этого надо было бы, чтобы страна «А» производила и поставляла какую-то продукцию стране «Б», которая покрывалась бы встречными поставками страны «В» или «Д», предполагая соответствующие пропорции обмена между «А» и «В», «Б» и «В» и т. д.

Эта проблема усугублялась еще одной трудностью, казавшейся также непреодолимой. Страны «А» и «Б», «А» и «В», «А» и «Д», «Б» и «В» и т.д. торговали друг с другом на базе очень различных цен, следя лишь за тем, чтобы их поставки взаимно балансировались, а отклонения не превышали предусмотренные границы. Взаимные расчеты велись, как правило, в рублях, однако величина товарного эквивалента этого рубля зависела от того, какие товары обменивались между странами. Иными словами, если страна «А» имела задолженность стране «Б» и требование в рублях к стране «В», то рубль в отношениях между странами «А» и «Б» имел совсем иную стоимость, чем рубль, применяемый в обороте между странами «А» и «В» или «Б» и «В». Следовательно, и речи не могло идти о том, чтобы рубли, применяемые в торговом обороте различных стран, считались бы эквивалентными друг другу, а, значит, и о том, что страна «А», имея требование в сумме 1 млн. рублей к другой стране и долг в сумме 1 млн. рублей третьей стране, могла бы взаимно засчитывать их. Обе указанные трудности проявились здесь совместно. Требование в сумме 1 млн. рублей не могло погасить задолженность в сумме 1 млн. рублей потому, что стоимость 1 млн. рублей была иной в дебиторской и кредиторской задолженности, а также потому, что для покрытия задолженности служили бы такие товары, в которых страна-кредитор — согласно плану — не нуждалась.

Здесь мы имеем дело со специфической формой проявления одного общего закона. Известно, что развитие производительных сил требует изменений в производственных отношениях. Как правило, движущей силой служит развитие производительных сил, а производственные отношения лишь с некоторым опозданием сдвигаются в направлении требуемом развитием производительных сил. Мы можем найти множество примеров таких взаимозависимостей и движений в развитии как социалистических, так и несоциалистических стран. Нередко бывает, например, что развитие производительных сил сопровождается усилением обобществления производства, значительным ростом натурального и стоимостного объема средств производства, машин, оборудования, сооружений, сырья. Этот количественный рост средств производства в результате развития производительных сил — будь то результатом открытия и освоения новых материалов или новых производственных процессов или новых машин — вызывает изменения в производственных отношениях, например, в отношениях между центральным плановым органом и производственным предприятием, в области управления, в степени централизации и децентрализации, в отношениях между производственным предприятием и внешней торговлей, в степени самостоятельности и кредитных условий производственного предприятия и т.д. Таким образом, в результате развития производительных сил произошло изменение в производственных отношениях, и изменившиеся производственные отношения уже предоставили соответствующую сферу движения для возросших производительных сил, быть может, и для их дальнейшего развития.

Изменения произошли и в производственных отношениях стран-членов СЭВ и СЭВ в целом — в планировании, в условиях расчета между странами СЭВ и, вообще, в сфере обращения. Однако эти изменения не приобрели такого масштаба, который обеспечил бы во взаимной торговле и финансовых расчетах стран СЭВ

соответствующий простор развитию производительных сил. Если дать обобщающее название этим отстающим и затрудняющим, тормозящим развитие производственным отношениям, то можно сказать, что здесь речь идет о товарно-денежных отношениях. Стоит подчеркнуть, что во многих местах в Комплексной программе экономической интеграции — к этому я еще вернусь ниже — указывается на необходимость развития этих производственных отношений. Уже пункт 4 первой главы следующим образом выделяет товарно-денежные отношения: «страны-члены СЭВ исходят из того, что система экономического и научно-технического сотрудничества стран-членов СЭВ основывается на общих закономерностях социалистического строительства и основных принципах руководства социалистической экономики, на органическом сочетании координации планов как основного метода организации сотрудничества с более широким использованием товарно-денежных отношений».

Подчеркивание значения товарно-денежных отношений отнюдь не является новостью. Уже более десяти лет тому назад в странах СЭВ и в организациях СЭВ указывалось — причем все растущим числом экономистов и во все более широком плане — на чрезвычайно узкий характер господствующих в настоящее время товарноденежных отношений, затрудняющий, замедляющий, тормозящий развитие во многих областях. Как я уже отметил выше, рубль обладает различной стоимостью в обороте между двумя различными странами-членами. Это, между прочим, почти исключает создание совместных производственных предприятий и осуществление совместных капиталовложений. Ибо каждый раз вновь возникает вопрос о том, как производить взаимные расчеты, как привести к общему знаменателю взносы отдельных стран на создание предприятий или на капитальные вложения, как следует рассчитывать издержки производства и как прибыль. Эти расчеты исключительно сложны и требуют применения различных индексов и расчетных коэффициентов даже тогда, когда речь идет о совместном предприятии двух стран, например, о польско-венгерском предприятии «Хальд-экс». Между прочим, трудности возникают не только в связи с расчетами, но и с увязкой совместного предприятия, капиталовложения и т. п. с различными системами планирования стран-членов. Неизбежно подобные же проблемы возникают и в других областях сотрудничества, так, например, в области специализации, кооперирования, а также научно-технического сотрудничества. Время от времени повторяются сетования на то, что хотя во всех этих областях произошло значительное развитие, оно могло бы быть везде гораздо более быстрым.

Однако отсталость товарно-денежных отношений имеет и другие, не менее тяжелые последствия. Системы цен и пропорции цен во всех без исключения странах-членах СЭВ не в состоянии сами по себе — без применения различных вспомогательных инструментов — дать необходимую информацию об эффективности производства или капиталовложений. Время от времени в каждой стране принимаются реформы цен в целях достижения соответствия, по крайней мере, оптовых цен затрат. Однако эти реформы цен не могли в полной мере устранить трудности, вытекающие из исключительно большого различия в эффективности отдельных средств производства внутри отдельных отраслей производства, и никогда не распространялись или влияли на розничные цены, весьма слабо зависящие

от соотношений затрат, но весьма сильно влияющие на соотношения потребностей и потребления. Эти недостатки в каждой социалистической стране очень затрудняют выбор наиболее эффективных методов, решений в производстве, капитальном строительстве, специализации и сотрудничестве и, таким образом, задерживают осуществление стремлений к повышению эффективности производства. Это положение усугубляется тем, что пропорции цен — как оптовых, так и розничных, — в каждой социалистической стране отличаются от пропорции цен во всех других социалистических странах. Вдобавок эти цены в каждой социалистической стране — в большей или меньшей мере — оторваны от цен мирового рынка. Изменения пропорций цен в несоциалистическом мире, т. е. в большей части мира, и, особенно, в развитых индустриальных странах, — хотя могут вызываться другими причинами, например, влиянием монополий, конъюнктурными колебаниями, спекуляцией, — в первую очередь объясняются тем, что производительность труда и издержки производства по-разному меняются в различных отраслях производства и в производстве различных изделий. Таким образом, изменения пропорций цен — особенно, если они значительны, — указывают на то, что мы имеем дело с последствиями относительно значительного научно-технического развития. Но поскольку такие изменения почти не влияют на соотношения внутренних цен, на пропорции цен в большинстве социалистических стран, на эти сигналы не обращается внимание.

Можно было бы долго перечислять отрицательные последствия относительной отсталости товарно-денежных отношений во внутренних и взаимных связях социалистических стран. Однако, мы полагаем, что приведенные примеры в достаточной мере красноречивы и не требуют дополнения. Между прочим, такое дополнение содержится в разделе Комплексной программы, посвященном развитию валютно-финансовых и кредитных отношений. В нем подробно перечислены функции, которые должна выполнять коллективная валюта, стало быть, для выполнения которых страны СЭВ сегодня не располагают соответствующим инструментом. Коллективная валюта должна выполнять основные функции международной валюты (меры стоимости, средства платежа и средства накопления), должна быть фактически переводимой и обладать реальным курсом. Она должна позволить принятие экономически обоснованных решений, содействовать совершенствованию взаимных расчетов и расчетам в национальной валюте при совместном строительстве и эксплуатации объектов. Она должна содействовать созданию форм и методов финансирования и расчетов международных организаций, распределения прибыли, вытекающей из их деятельности, а также расчетов, осуществляемых при передаче и обмене результатами научно-технических исследований. Правомерен, однако, вопрос: если отмеченные выше и иные недостатки уже известны в течение продолжительного времени, почему не удалось их устранить сегодняшний день?

На этот вопрос, пожалуй, можно правильно ответить, указав, что здесь речь идет о задаче исключительного значения и масштаба, требующей тщательной и продолжительной подготовки и большой ответственности. Когда эти вопросы возникли свыше десяти лет тому назад, многие отмахивались от них, говоря, что здесь идет речь о второстепенной проблеме, относящейся к сфере обращения.

Важно планирование и производство, и если там мы добьемся хороших результатов, то и в обращении произойдут необходимые изменения. Это умствование хромает на обе ноги. С одной стороны, процессу воспроизводства могут помешать неурядицы, возникающие как в обращении, так и в производстве. С другой стороны, необходимые изменения не происходят сами по себе, автоматически. Однако в определенной мере можно объяснить, почему чуждаются изменений, если иметь в виду, что эти изменения касаются не одной, а многих важных областей экономической жизни, и что отчасти речь идет об очень глубоких изменениях, ломающих долгие привычки, укоренившиеся навыки. Задачу усложняет, что затрагивается, с одной стороны, каждая страна СЭВ, а с другой, — вся разветвленная система взаимосвязей стран СЭВ. Поэтому предпринимаемые каждой страной в своей компетенции и по своему усмотрению шаги необходимо согласовывать с мероприятиями, осуществляемыми по общему согласию во внешнеэкономических, международных отраслевых производственных, научно-технических, валютно-финансовых и других организациях и органах СЭВ.

Когда производительные силы — как и в наши дни — быстро развиваются и преобразуются, производственные отношения также не должны окостеневать. Среди производственных отношений, отстающих от развития и тормозящих его, важнейшими являются как раз те, о которых говорилось выше, но в развитии нуждаются не только они. В быстро развивающихся социалистических обществах производственные отношения требуют как говорят в другом отношении, текущего ремонта, но и здесь это слово хорошо выражает сущность. Между прочим, в тех предложениях, которые в Комплексной программе рассматриваются в связи с «совершенствованием систем планирования и управления народным хозяйством» и в рамках его с «использованием материального стимулирования и заинтересованности» или «планированием, финансированием и использованием капитальных вложений», речь идет в первую очередь также о желательном развитии производственных отношений.

Никакие научные усилия не в состоянии сделать изменения, переход от старого к новому легким и быстрым. Но наука может разведать предпринимаемые шаги, выяснить их необходимость и вероятные последствия постольку, поскольку это возможно вообще до начала практического исполнения. Конечно, при крупных изменениях нельзя избежать неожиданных оборотов, сюрпризов разного рода и трудностей даже при условии предварительного выяснения. Однако, если с помощью науки удастся сформировать относительно единое мнение лиц, полномочных для принятия решений, то наука этим может существенно помочь развитию сотрудничества стран СЭВ и — тем самым — ускорению развития мирового социалистического хозяйства и социалистического общества.

Растущая роль экономической политики

Выше мы предостерегали от того, чтобы на основе опыта, полученного в относительно небольшой области и за относительно короткое время, пытались наметить законы построения социалистического хозяйства, охватывающего весь

мир. Такая попытка может быть только гаданием или проекцией упрощенной схемы в далекое пространство и время, но отнюдь не наукой. С точки зрения же науки вполне обоснован вопрос о том, какое развитие можно ожидать в содружестве стран СЭВ на основе тенденций, развертывающихся и наблюдаемых в социалистическом и несоциалистическом мире. Правда, на этот вопрос можно ответить и так, что это развитие предписано на 15–20 лет принятой в 1971 году Комплексной программой, и из этого срока прошло немногим больше пяти лет. Но в Комплексной программе говорится не о том, что будет, а о том, что делать. И об этом говорится в ней, не устанавливая очередности задач ни по времени, ни по значению. А почему она не освобождает нас от обязанности поисков ответа на поставленный вопрос.

Обозревая уже бегло рассмотренные внутренние и еще не затронутые внешние факторы, среди многообразных тенденций можно подметить одну выделяющуюся и все более становящуюся господствующей тенденцию — все более последовательное осуществление примата политики и экономической политики социалистических стран. Выше уже говорилось, что создание СЭВ было не неизбежным следствием экономического развития, а сознательным вмешательством в развитие, акцией экономической политики. Правда, это вмешательство потому могло стать таким успешным, что оно соответствовало закону экономического развития, находилось в фарватере этого развития. И с тех пор определение всех важных областей и направлений деятельности СЭВ представляет собой акт вмешательства экономической политики, в большинстве случаев — результат предварительного совещания и договоренности руководителей партий и правительств стран-членов. Разумеется, эти вмешательства не противоречили законам, вытекающим из развития, самодвижения социалистических обществ и народных хозяйств, а, наоборот, позволили облегчить, ускорить действие познанного закона.

Вначале СЭВ был важен для стран-членов главным образом потому, что открыл возможности взаимных контактов для стран, еще далеких и чуждых друг другу, обеспечил стабильные связи, в первую очередь, в области внешней торговли и научно-технического сотрудничества. Эти контакты вначале лишь слабо затрагивали, но со временем во все большей мере модифицировали направления развития экономики отдельных стран. Выше мы рассмотрели, как распространялось сотрудничество на все новые и новые элементы экономической жизни — охватило производство, энергетическую систему, снабжение топливом и сырьем, транспорт, пыталось разрешить возможности специализации и кооперирования, как со многих сторон, включая и капиталовложения, влияло, на структуру экономики дружеских стран. Соглашения заключались на все более длительные периоды в различных областях сотрудничества. Возросла способность СЭВ, то есть социалистического содружества, к формированию экономической жизни, развития своих стран-членов.

Содружество и его члены укрепляли, множили силы друг друга благодаря благотворному, многостороннему эффекту бесчисленных взаимных контактов. Развивалась — отчасти на основе познания причин менее и более значительных ошибок, неудач и последующего их исправления — экономическая политика отдельных стран, укреплялась ее научная обоснованность. Это повышало и внутри СЭВ требования к научному обоснованию экономической политики, повышая

также и уровень работы в органах СЭВ. В свою очередь, сотрудники, работающие в органах содружестве и представляющие там свои страны, также предъявляли все более высокие требования к практической и теоретической работе в своих странах, повышая тем самым ее уровень. Например, в свое время представителями некоторых стран была выдвинута мысль и предложение по составлении перспективных народнохозяйственных планов на 15–20 лет, и после этого в рамках СЭВ была достигнута договоренность о разработке каждой страной своего народнохозяйственного плана на тот же самый двадцатилетний период и о согласовании этих планов между собой.

В этом же направлении — в направлении повышения научного уровня и значения экономической политики — развивается вся деятельность СЭВ, каждая форма сотрудничества. Другими словами, укрепляется экономическое сотрудничество, согласование экономической политики стран-членов в целях экономического развития всего содружества. Различные моменты этого развития уже встречались нам при обзоре развития отдельных форм сотрудничества. В середине 50-ых годов это уже выражалось в том, что страны-члены приступили к согласованию своих пятилетних народнохозяйственных планов, заключали друг с другом долгосрочные торговые соглашения; в начале 60-ых годов координация планов была признана основной формой сотрудничества, главным методом деятельности СЭВ; была начата координация планов — сначала до 1980 года, затем — до 1985 и позднее — до 1990 года (но в области производства энергии, топлива и важнейших сырьевых материалов и во многих других областях взаимное согласование намерений, соображений и планов распространилось на еще больший период); в 1971 году в Комплексной программе было заявлено о взаимных консультациях, проводимых по основным вопросам экономической и научно-технической политики; на XXX сессии СЭВ была достигнута договоренность о разработке долгосрочных целевых программ сотрудничества в некоторых очень важных областях производства.

Круг вопросов, по которым страны-члены проводят или будут проводить в соответствии с Комплексной программой консультации по экономической политике, охватывает самые важные цели и задачи, стоящие на повестке дня в каждой стране, и все важные средства, служащие их достижению. Однако некоторые формы сотрудничества, особенно некоторые крупные капиталовложения, осуществляемые совместными усилиями заинтересованных стран, уже и сегодня выполняют одновременно несколько задач в области экономики и экономической политики. Они формируют структуру производства, территориальное размещение производительных сил, кадры специалистов и их подготовку, транспорт и влияют на многие другие экономические факторы в той стране, где осуществляется капиталовложение. Одновременно они могут сильно повлиять на структуру производства, состав специалистов, капитальные ресурсы, финансовое положение и других стран-участниц, участвующих в строительстве поставками, научно-техническим сотрудничеством, проектированием, предоставлением товарных или валютных кредитов, а также на другие факторы, влияющие на экономическое и техническое развитие этих стран.

Мы относительно подробно остановились на трудностях и проблемах, вызываемых определенным отставанием производственных отношений, их окостене-

нием, затрудняющим свободное движение, развитие, рост производительных сил. Из их числа мы остановились подробнее на тех, которые связаны с неудовлетворительным формированием товарно-денежных отношений, так как в нынешних условиях это — большой тормоз более широкого развертывания нашего экономического сотрудничества в производстве, специализации, кооперировании, научно-техническом сотрудничестве, создании совместных предприятий, совместных капитальных вложений, финансовых операций и т. д. Мы знаем, что существуют и другие производственные отношения, которые уже не служат адекватной формой движения для быстро развивающихся производительных сил. Однако мы знаем и то, что изменения этих производственных отношений и, особенно, товарно-денежных отношений требует исключительно тщательной, осмотрительной, многосторонней и продолжительной подготовки. Необходимы отчасти шаги, которые полностью входят в компетенцию стран-членов, и отчасти, опираясь на них, согласованные шаги стран-членов, касающиеся всей организации СЭВ, чуть ли не каждой ее части. Следует пересмотреть многие укоренившиеся привычки, образы поведения, а это всегда наталкивается на сопротивление сторонников привычного. Речь идет, однако, не только о противоречии между старым и новым. Со старым примирялись многие — лица, группы, организации — не только потому, что к нему привыкли, но и потому, что при нем им удавалось защитить и свои интересы. Здесь речь идет также о противоположности интересов. Поэтому-то и не легко придти по этим вопросам к единому мнению и решению в отношении экономической политики ни в рамках одной страны, ни всего СЭВ в целом. А между тем, этого не избежать. Ученым общественных наук, в первую очередь, экономистам необходимо очень тщательно разработать научное обоснование требуемых шагов в политике и экономической политике, чтобы компетентные партийные и государственные органы смогли действовать.

Согласно изложенному выше, внутренние факторы развития СЭВ и его стран-членов, их взаимосвязи по необходимости привели к возросшему значению экономической политики. Есть и внешние факторы, влияющие в этом же направлении. Крепнут международные позиции мировой социалистической системы, растет международный авторитет СЭВ и его притягательная сила для других стран. Этот авторитет и притягательная сила увеличивается и упрочняется благодаря, с одной стороны, быстрым темпам экономического роста стран СЭВ, превышающих темпы роста несоциалистических стран, а, с другой стороны, — экономической и политической стабильности стран-членов; тому факту, что среди политических и экономических бурь и кризисов международной жизни они остаются непоколебимыми, что их четкая, научно обоснованная политика, экономическая политика обеспечивает неуклонный рост благосостояния их народов. Этот факт усиливает интерес и симпатию к социалистическим странам особенно в развивающихся странах, и среди них в первую очередь в тех, перед которыми открыта возможность некапиталистического пути развития. Задача науки, причем задача, осуществляемая совместными усилиями ученых общественных наук стран СЭВ — дать ответ на жизненно важные для развивающихся стран вопросы и особенно тем из них, которые нащупывают пути социалистического развития. Необходимо со знанием дела основательно и тщательно разработать — широко используя собствен-

ный опыт — те, по всей вероятности, различные для отдельных стран или групп стран политические и хозяйственно-политические стратегии и тактики, при помощи которых они могут, получив политическую независимость, постепенно разорвать пути, наложенные на них империалистическими державами и монополиями, и могут избежать экономические и политические ловушки неокOLONиализма, маскируемые под экономическую и военную помощь.

Растет вес социалистических стран и СЭВ также и в международных экономических организациях. В них на первый план все более выдвигаются крупные проблемы мировой экономики — проблема энергии, сырья и продовольствия, обеспечение которых стало все более затруднительным, по крайней мере, требует все более растущих затрат, охраны окружающей среды, касающейся одновременно многих наций; очистка и сохранение чистоты рек, морей и океанов; ликвидация грозящей с разных сторон радиации. Без международной договоренности, без объединенных усилий эти проблемы нерешимы. А международного согласия и объединения можно и нужно достичь в первую очередь между странами СЭВ. Они должны совместно разработать политику и экономическую политику, наиболее эффективно служащую решению данных проблем, и рассматривать их в качестве важной части своих собственных экономических политик. Они должны сформировать общую позицию по вопросам экономической политики, важных также и для стран СЭВ, рассматриваемых в больших международных организациях, в ООН и ее важных организациях — как, например, ЕЭК, ЮНКТАД, — в международных организациях развивающихся и неприсоединившихся стран, профсоюзов, в ГАТТ и т. д.

В рамках СЭВ необходимо формирование и осуществление согласованной экономической политики по еще более широкому кругу вопросов. Уже неоднократно ставился на повестку дня различных органов СЭВ вопрос о необходимости согласования странами-членами торговой и экономической политики и практики в отношении третьих стран. Принимались по этому вопросу и постановления, но без ощутимых результатов. Между тем, в последние годы в международной экономической жизни возросло значение согласованной социалистической экономической политики. Прекратилась обратимость доллара в золото, рухнула валютно-финансовая система, созданная после второй мировой войны и охватывавшая капиталистический мир, валюты развитых капиталистических стран потеряли значительную часть своей стоимости, стала всеобщей инфляция, темпы которой нередко достигают двузначных чисел, на мировом рынке резко подскочили цены на некоторые энергоносители, сырье и продовольствие, коренным образом изменились соотношения цен и тенденции цен на мировом рынке, и все это привело к экономическому кризису, затронувшему почти все капиталистические страны, к безработице, превышающей 15 млн. человек. Разумеется, все эти крупные экономические сдвиги повлияли и на страны СЭВ. Значительную часть своей внешней торговли страны СЭВ ведут с капиталистическими странами, и между странами с различным общественным строем существуют и другие, хозяйственно-технические, производственные и финансовые связи. Очевидно, что при единой хозяйственно-политической реакции социалистическим странам легче устранить отрицательные последствия импульсов, поступающих из капиталистичес-

кого мира. Важность согласованной, взаимоувязанной экономической политики в отношении капиталистических стран подчеркивается конференцией в Хельсинки, точнее, тем процессом разрядки в мировой политике и, особенно, в Европе, выдающимся этапом которого был Хельсинки. Множатся экономические связи между социалистическими и капиталистическими странами, и мы можем их использовать в максимальной мере в деле упрочения разрядки, мира и укрепления нашей системы, если будем руководствоваться должным образом согласованной экономической политикой.

Мировые и внутренние экономические процессы, события, вместе взятые, предъявляют повышенные требования как к отдельным странам СЭВ, так и к СЭВ в целом. Большинство небольших стран-членов имеет скудные сырьевые ресурсы, и ни одна из них не располагает сырьем, необходимым для всех отраслей производства. Их самый важный поставщик сырья — СССР. Но сырьевые месторождения Советского Союза в европейской части страны или близко к ней нельзя считать неисчерпаемыми, а его практически неисчерпаемые ресурсы сырья располагаются в далеких, трудно доступных районах с суровым климатом, их разработка значительно удорожает сырьевые материалы. Однако и эти более дорогие сырьевые материалы не покрывают быстро растущие потребности небольших стран СЭВ в сырье, поэтому они во все большей мере вынуждены использовать капиталистические источники сырья. Значит, во всех странах-членах повышаются издержки производства. Если страны СЭВ хотят хоть приблизительно сохранить нынешние темпы развития экономики и роста народного благосостояния, то для этого недостаточно просто продолжать наблюдаемые до сих пор тенденции — увеличение и расширение элементов интеграции. Необходимо поднять на более высокий уровень всю хозяйственную работу, повысить в каждой стране, в каждой отрасли производства эффективность общественного труда, ускорить технический прогресс и рост производительности труда. Эти повышенные требования можно удовлетворить только тогда, если преобразуется структура производства, система управления, планирования и материального стимулирования в народном хозяйстве. А их преобразование возможно только при наличии научно обоснованной экономической политики, а это в свою очередь осуществимо лишь тогда, если страны-члены объединят свои научные усилия, позаимствуют друг от друга все передовое, прогрессивное, учитывая и сохраняя все то, что в отдельных странах соответствует их условиям и оправдало себя на деле, сочетая эти специфические черты с требованиями, вытекающими из законов международного опыта.

Когда мы повторно говорили о взаимоувязанных, согласованных позициях по экономической политике, мы имели в виду не унифицирование или слияние экономических политик различных стран СЭВ. В этом, по крайней мере, в обозримом будущем нет ни нужды, ни возможности. Не раздумываем мы и о том, что будет через несколько десятилетий, когда все внешние и внутренние условия коренным образом изменятся. Можно предположить, что действительность — как это всегда бывает — будет иной, более многогранной, многоцветной, чем мы ее можем сегодня представить. А если это предположение справедливо, то и путь к этому будущему лежит через одновременное развертывание единства и многообразия.

Каждая социалистическая страна постоянно формирует, развивает свою экономическую политику. Составные части, элементы экономической политики берут свое начало из многих источников — из практики предприятий, из научных изысканий, из хозяйственного опыта и постепенно становятся частью экономической политики. Согласованная экономическая политика в рамках СЭВ может складываться только постепенно, шаг за шагом, потому что — как и всякое плодотворное экономическое сотрудничество — она формируется только с учетом и удовлетворением интересов каждой страны СЭВ. Согласовать интересы, найти точки их соприкосновения, включить их в различные национальные и коллективные организации, институты, системы регулирования — это задача нелегкая, но, пожалуй, достойная усилий партийных и государственных руководителей, ученых и специалистов.

ON THE LAWS GOVERNING COOPERATION AMONG CMEA COUNTRIES

I. FRISS

In the first chapter of the study the author calls attention to the fact that it can be established only with careful investigation to what extent laws observed under given conditions are valid under other ones. It occurs in the literature treating socialist economic integration that from the laws observed in the development of CMEA countries far-reaching conclusions are drawn for the development of the whole socialist world economy in the next decades and also when the whole world will be socialist. There is no even development free from contradictions, but it can be established as a law valid for the CMEA countries and that can be generalized for the socialist world economy that the forces or production are steadily growing, the welfare and culture of the population are continually increasing and the economies of the socialist countries are increasingly intertwining.

In the next two chapters a picture is given of the growing cooperation among CMEA countries. The author shows the results attained through cooperation and the second presents the development of the various forms of cooperation.

In chapter four the author shows that the lagging behind of particular relations of production, planning methods, organizational forms and, especially, of commodity and monetary relations relative to the development of the forces of production puts a brake on the whole development in many respects. There exists no such currency of the CMEA countries that could be a common denominator of the values expressed in the national currencies of the member countries. Therefore, every joint venture, investment, scientific and technological cooperation, specialization and cooperation in production between two or more socialist countries raises accounting and settlement problems difficult to solve. Besides, the relative producer and consumer prices of each socialist country differ from those of the others, but also from those prevailing on the world market. Changes are rendered difficult by deeprooted and ramified reasons. But science may help in clarifying the steps to be taken, it may contribute to the development of a harmonized standpoint by those who are competent to take decision.

In the concluding chapter the author points out a general trend: internal and external factors demand that problems affecting ever wider fields, of longer horizon, in part of world-dimension and requiring harmonization of economic policies should come to the fore in the whole activity of the CMEA. A harmonized economic policy can develop within the CMEA only gradually, step by step, because — similarly to every fruitful cooperation up to now — it can be worked out only by taking into account the interests of every member country. For this the united efforts of scientists and practical experts are needed.

Á. BALASSA

ACHIEVEMENTS OF AND LESSONS FROM THE MEDIUM-TERM PLANNING IN THE HUNGARIAN ENTERPRISES

The article analyses the drafting of enterprise and cooperative plans for 1976–1980 and the related activities of the state organs of economic control. The author evaluates the positive and negative experiences, and also examines some questions of principle, e.g., those affecting relations between enterprises and state organs. He also reviews further tasks related to the improvement of planning.

The participation of Hungarian economic units (enterprises, cooperatives, trusts, unions etc.) in the preparation of the fifth five-year plan for 1976–1980 was an important event in the economic life of Hungary.

The recently completed analysis of medium term planning activity in the enterprises bears out that

- the preparations and the provision of the conditions necessary for planning in the enterprises were made well ahead both by the economic control organs of the state and by the enterprises as against earlier periods; the preparations were also more circumspect and careful;

- planning was performed in a more organized, more thorough way than earlier, and relied on sounder technological-economic bases;

- in general, the economic control organs performed well their tasks related to the preparation of enterprise plans, they gave useful help to improving planning methods and raising the contentual standards of the plans;

- the plans prepared and approved are basically in harmony with the fifth five-year plan for the national economy, they are more realistic than earlier plans, better observe the possibilities and requirements; the targets and the means are in good harmony, and consequently, they provide a better orientation for the economic activities of enterprises for several years ahead.

Although the standard of enterprise planning activity had improved, it was found that both the organs of economic control and the enterprises failed to fully exploit the lessons from earlier planning work, they repeated many already known mistakes and made new ones as well. This was a partial cause why the requirements deriving from the changed and rapidly changing conditions were not fully recognized. With a more solid and uniform approach, with more purposeful and careful work the enterprise planning could have made a better progress.

Activity of the economic control organs

According to the basic principles of the Hungarian system of economic control, the plans of the enterprises and cooperatives are drawn up and approved by themselves, in

accordance with the goals of economic policy and the economic tasks determined by the economy-wide plan. In order to be in harmony with the national plan, the plans of the enterprises must be prepared so as to correspond to the following requirements:

- they must cover the decisions (if any) of the national plan directly affecting the activity of the enterprise concerned;
- they should provide for the realization of the requirements deriving from the national plans and expressed by the means of control;
- they must take into account resources from the state budget only to the extent and for the purpose determined by the national plan, and what can be relied upon with certainty on the basis of the system of economic regulation.

Within these limits, the enterprises have a free hand and a full responsibility in determining the contents of their plans.

While leaving the independence and responsibility of the enterprises intact, the state organs of economic control have significant tasks in connection with the planning activities of the enterprises: on the one hand, they draw the enterprises into the completion of various important tasks related to national planning, and, on the other, they provide help to the enterprises in the preparation of enterprise plans and mediate in organizing cooperation among enterprises. In connection with the preparation of the enterprise plans the economic control organs had a multiple role: providing methodological help in the preparation of plans; continual information; consultations; helping cooperation and coordination among enterprises; evaluation of enterprise plans.

The national Planning Office and the organs of the national economic branches and the functional agencies performed their relevant tasks well, in a centrally controlled and organized way. Their activity was considerably more active and determined, manifold and responsible than five years ago. An especially great organizing activity was performed by the branch ministries. The activity of the state organs made a significant contribution to the development of enterprise planning, to the preparation of well-founded enterprise plans and to the creation of harmony between the national economic and the enterprise plans.

Yet, the efficiency of the work was impaired by certain problems in the approach to the purpose and function of enterprise planning and to the relevant tasks of the control organs. Instances of wrong methods applied by certain organs also pertain here. In some cases the essence of enterprise planning was reduced to the "reflection of central plans", i.e. that the enterprises should set such targets as would agree with the figures of the computational results of the national plan when added up with the figures of the other enterprises in a given industry. Although this approach starts in the final analysis from a correct requirement, it overdoes and exaggerates thus bringing about counter-productive results: takes away the flexibility of planning, limits the unfolding of the initiatives, impedes active economic work, thus, in the final analysis, hinders the realization of the goals of the national plan.

The roots of this approach lie in the following:

- a false interpretation of the concept of planned economic development, according to which there is but one possible way for the realization of the plan targets, to be determined through breakingdown the computations on which the plan is based, even though the changing economic conditions cannot be assessed unambiguously.

— overestimation of possibilities available to the state organs of economic control to learn about and evaluate the different conditions affecting individual enterprises and to devise an optimal combination of the factors determining the management of the enterprises.

— lack of confidence in the efficiency of the system of tools serving the realization of the national plan on the one hand, and in the enterprise managers that under suitable economic conditions they are able to make correct decisions on their own and strive actively to achieve favourable results.

— underestimation of the purpose and function the enterprise plan; questioning of its being a real action program for the enterprise which contains in the first place the aims and tasks related to the development of enterprise activity, as well as the means and measures necessary for realization, and which mobilizes the community of the enterprise for its fulfilment.

This approach emerged in the planning process more or less markedly at different places, and, although it did not dominate the planning work, it had a disturbing effect.

Let us survey the activity of economic control agencies in the order of their tasks related to enterprise planning.

Elaboration of the *methods of enterprise planning* is a task of the enterprises themselves. To help this work, the President of National Planning Office issued a set of methodological directives in September, 1974. In the light of the results, these set down correctly the aims of enterprise planning, the tasks of preparation, organization, and implementation, the main characteristics of the elaboration of the plan, the preparation, method and content of the approval of plans, the basic principles of relations with the control organs and partner enterprises.

The directives of the President of the National Planning Office were complemented by the methodological recommendations of the branch ministries. These provided significant help for the enterprises in the formation of the plan categories and indicators in the classification of the contents and interrelations of these indicators. In certain cases, the recommendations were reduced to giving uniform tables and indicators, thus failing to give enough methodological advice and help in the foundation of the plans in meritorial respects and also failed to differentiate between enterprises according to their specific range of activity, character and size or according to the phases of the planning process.

Among the kinds of *information* necessary for planning in the enterprises, those provided by the state organs of economic control played supreme importance. In this respect a fundamental improvement had been achieved. The state organs started from the principle that the former practice of "monopolizing" information was wrong; instead, the mutual information of state organs and enterprises, must be amplified to the utmost, within certain limits. Beyond the already mentioned participation in national planning, the enterprises were informed also by the National Planning Office, the branch ministries, and functional organs in writing or by means of consultations about the concept of the five-year plan under elaboration, later about the plan itself, the fundamental principles and computations, the requirement towards the development of the individual branches about, the planned modifications of the means of regulation, the negotiations concerning plan coordination with CMEA countries and other partners, etc.

In the present phase of enterprise planning special attention had to be paid to their information. This was justified by several factors: the new five-year plan called for significant changes in many respects; adjustment of the regulating system to the new conditions and requirements could take place but relatively late; the enterprises needed some time for reflection, for the assessment and evaluation of the changes, and for adaptation to them. Under such circumstances it was expedient to give the enterprises more definite and unambiguous guidelines than usually. For this reason, it was correct procedure on part of the ministries to inform the enterprises not only about the future conditions of management, but also about the increased requirements of the national plan. Such a thorough information proved useful and significantly contributed to the foundation of the plans.

Information was usually provided in time, but enterprise managers often complained that they had received unambiguous information concerning the changes of the regulating system only in the final stages of planning. This was undoubtedly so, but not without reason: after the considerable changes in the conditions of the world economy it took some time to work out regulators suited to the objectives of the national five-year plan.

Beyond information, certain ministries also told the enterprises what figures they "expected" to be planned. For instance, one ministry gave figures for every significant indicator of the enterprise economy, and even elaborated such detail figures as the number of machines to be scrapped, even though these cannot be safely established on the ministry level. Thus, the ministry, though unintentionally, took over the responsibility from the enterprises for the evaluation of the conditions of enterprise management and for the choice of the optimal path of development. In such cases the managers of the enterprises might have felt, wrongly, that the importance and necessity of autonomous planning activity had diminished and the enterprise had only to "re-plan" the figures obtained; the more so as the control organ might qualify the planning activity of the enterprise according to how strictly it passed back the plan figures suggested (and not according to how well the plan was compiled, how realistic the targets were and how the enterprise prepared for the realization of the plan).

On several occasions during the planning process, the ministries themselves also asked for information from the enterprises, within the framework of mutual information, concerning the intentions of the enterprises and their plans under preparation. This also provided a basis for the consultations held with the enterprises. The continuous surveillance of the aspects, intentions, plan concepts of the enterprises was very important as this partly helped the economy-wide planning work of the ministries and, partly provided a possibility for ministerial intervention in case of real necessity (through consultation, calling the attention of the enterprises to other aspects of the planning problem, recommendations, advice, instruction etc.). On the whole, this channel of the exchange of information functioned satisfactorily.

At the same time, however, it was sometimes found that the ministries — or other economic and social organs — were not circumspect enough when defining the sphere of the requested information: they asked for the information earlier than justifiable, in greater detail, or with an unusual content, and also asked for the preparation of data which were suited rather for the purposes of operative planning. This resulted in

unnecessary paperwork for the enterprise on the one hand, and failed to satisfy the needs of the organ concerned on the other.

In spite of the above mentioned deficiencies and the excesses often rooting in lack of experience, the mutual exchange of information between the economic control organs and the enterprises has attained a higher standard and this can be regarded as a great step forward towards reinforcing relations between national and enterprise planning.

Besides mutual exchange of information, *consultations* also played a significant role. On these occasions, having received information about the results of national planning and the planned changes in the regulating system, the managers of larger enterprises could also voice their opinion and ideas about the debated questions. However, it is beyond doubt that the consultations about the plan concepts of the enterprises played a more important role in practice. These were usually organized by the branch ministry. State organs like the National Planning Office, the Ministry of Finances, the Ministry for Foreign Trade, the National Bank of Hungary and other organs were also represented at such consultations, together with other political organs and the local council, and often also the representatives of the foreign trading, and of the domestic commercial partners. (Regrettably, however, representatives of the partner industrial ministries and enterprises did not often take part in the plan consultations of the trading companies.)

The first such consultations about the preliminary development concepts of the 80 most important enterprises were held as early as in 1974. A part of the ministries organized such conferences also in 1975, when the plan concepts of the enterprises had been drawn up. And, in the last phase, consultations were held in the second quarter of 1976, before the final approval of the enterprise plans.

The consultations generally proved useful in providing the managers with a closer insight into the factors and conditions affecting the development of the enterprises, in helping them to choose the most favourable direction, measure and way of development, in revealing the not sufficiently founded, sometimes unrealistic, spots or elements of the plan concepts. The representatives of the organs taking part in these consultations had the occasion the point out the weak spots in the plans of the enterprises, they could direct attention to the fact that opportunities for improving efficiency, or those of adaptation to circumstances and requirements had not been fully taken into account.

However, beside their considerable merits, the consultations also had their blind spots. In certain fields the plan concepts of the enterprises were not debated, or if they were, the conceptual questions of long-terms, 'strategic' importance, did not receive due attention. The consultations were not every where considered as processes, to be organized at different dates, as justified by the economic processes in the individual enterprises. Consultations involved a too wide sphere of enterprises and this rendered it difficult for the control organs to turn their attention to the evaluation of the concepts of such enterprises which would have to face really important problems. Concentration of consultations to a relatively short period also hindered an appropriate preparation for them.

In general, the consultations, were held in an objective, helpful atmosphere, and usually provided great help in the final elaboration of the enterprise plans. In certain cases, the consultations resulted in state, thus, compulsory, decisions on questions that pertain otherwise to the decision-making sphere of the enterprises. This was fully justified

in cases when the enterprise concerned had not taken into account the decisions of the national plan applying to the activity of the enterprise or had ignored inter-state agreements, or had reckoned with budgetary allocations not included in the national plan, or when the plan had contained obviously unrealistic elements. Sometimes, however, decisions were made at the consultations even on such questions of the enterprise plans on which the managers ought to have decided after hearing the opinions, advice and information at the consultation.

The fact that the character of the consultations changed in certain cases is well reflected by the expression "judging", used by certain ministries to call these meetings. This expression is inappropriate because the consultation is basically a forum for discussing the enterprise plan, and not one of decision on it. (This is so even though the minister has the right to give orders in justified cases.)

Thus, the consultation of enterprise plans was not, and could not be, an act of approving them. This is the right of the (general) manager of the enterprise or of the general assembly of the cooperative. This needs emphasizing also because responsibility for the decisions should be made more unambiguous, even if sometimes this cannot be fully achieved. In the final analysis, the manager of the enterprise is, in his person, responsible for the preparation of plans and for carrying on economic activity that results in the most efficient exploitation of the resources available to the enterprise. This, of course, necessitates a widespread and consistent practice of democratic management methods. In case the enterprise plan 'steers' the management of the enterprise in a wrong direction, it is the leader of the enterprise who is responsible and not the Ministry. At the same time, the moreal responsibility of the ministry is obvious for its economic decisions taken in the form of instructions. However, as the financial aspect of this responsibility is not unambiguous, such decisions should be kept within limits qualified by necessity.

After approval of the enterprise plans, the state organs of economic control analyzed the lessons from the planning process. The summarizing report of the National Planning Office was discussed by the Council of Ministers, and the State Planning Commission passed a resolution on it.

The planning activity of the enterprises

The medium-term planning activity of the enterprises was far from being uniform. Some enterprises made thorough preparations, organized the work well, performed a serious, and manifold planning activity, and prepared a meaningful, realistic and well founded plan. With other enterprises, however, these positive features were not present so markedly or at all. The overall standard of planning work has significantly improved. As against earlier plans, a substantially greater number of enterprises were successful in preparing their plans and few of them prepared unfounded plans.

The improvement of the standard of planning can be attributed to several factors:

- to the growing recognition that a successful development can only be achieved on the basis of a program for many years, i.e. on the basis of a medium-term plan well founded from many aspects;

- the majority of enterprises had drawn useful lessons from the medium-range planning for the years 1971–1975 and from its realization;

- the standard of management improved, the enterprises own planning sections improved, planners became better educated and more experienced;
- as has been mentioned, the organs of economic control also raised higher expectations towards the standard of planning.

At the larger, nationally more important enterprises preparations for planning began as early as the end of 1973 and early 1974. These enterprises performed a significant planning work already back in 1974 within the framework of their participation in economy-wide planning. This activity also helped the elaboration of their own plans, since it contributed to expanding the knowledge of the enterprise, to the unfolding of relations with other organs and enabled the enterprises to "check" their plans in wider circles. Another part of the enterprises began the preparation of the medium-term plan at the beginning of 1975.

The work began with working out methods for enterprise planning. This was better accomplished at enterprises which had experienced planners. In these, the recent domestic and foreign experiences in planning, up-to-date planning methods were consciously used. Other enterprises, however, waited until planning guidelines had been issued by the ministry. A part of the enterprises did not devise its own planning methods at all and only judged important to fill in the tables and workout the indicators recommended by the ministry. This fault is the greater as the enterprise planning methods must conform to the specialities of the enterprise. Obviously, the same indicators must be based differently, and also different other indicators must be used in large enterprises with several plants than in small enterprises; or in enterprises with a wide production spectrum than by producers of a few or simple products; or by those producing especially for export markets than by those producing mainly for domestic users; in highly capital-intensive enterprises than in highly labour intensive ones; in those undergoing a significant extensive development than in enterprises developing in an intensive way etc. The enterprises that failed to make methodological preparations for planning in time, later had to 'find out' the relatively best, or at least feasible, solutions and had, of course, to rely on estimations to a greater than justifiable extent.

The most difficult and, at the same time, most responsible, phase of enterprise planning was the formulation of the concept and strategy of the enterprise plan. As against earlier periods, more enterprises attributed great importance to this question. These enterprises even worked out alternative development concepts. The choice between the different alternatives was made on the basis of their own technological and economic capability to develop, depending on the requirements of the national plan and the market and on the basis of changes in economic conditions. It must be allowed that this was a difficult task for the enterprises, as these very factors were rapidly changing in 1975. In that period, many enterprises interrupted their medium-term planning activity, not least because of their tasks related to complex immediate operative steps and failed to work intensively on the formation of the planning concept. A fairly large part of the enterprises claimed a lack of knowledge of economic conditions, especially that of the regulators to come into force.

However, it is not justified to make the plan concept a function of the knowledge of the exact regulators to come into force. The tendencies in the relevant technological development, those of the changes in domestic and world market demands, and even the

growth of the own resources of the enterprise and the opportunities of availing themselves of auxiliary resources are all at least as important for independent forecasts — in the light of the information received concerning the main lines of changes in regulators. Only a few enterprises prepared such forecasts, though these could have helped in a better foundation and earlier determination of the main lines of the enterprise's plan concept.

The fact also pertains here that only a few enterprises based their plans on longer-term (8–10–12 years) development concepts (long-term plans). Even plans for a period of 6–8 years were rare, although this would have been reasonable with enterprises which expected that their major development projects would enter production after 1980.

Some enterprises reckoned with a lasting force of the then existing regulators and drew up their development plans accordingly. Some of these enterprises even stuck to their original concepts even after it had become known that the new regulators would reduce their own means available for development. Sticking to the former goals established in physical terms, the reckoned excessively with the availability of external resources. They realized the realistic conditions only in the final stages of the planning process. These enterprises had to revise their plans in 1976, thus hindering the planning work and the approval of the plans.

The majority of enterprises regarded this planning exercise, correctly, as the nucleus of organizing the economic activity of the whole enterprise. In these enterprises the preparation of the plan was not the exclusive work of a specialized unit, but was organized as a common task of the whole enterprise. Planning was related to the marketing activity, to the appropriate planning of research, the development of products and technology, and even to improving the organization of the enterprise.

The majority of the enterprises carried out active market research, assessed the expectable quantitative, qualitative, technological and economic characteristics of the demand for its products, and made an attempt at classifying the opportunities and conditions of its own purchases. At this point it must be mentioned that cooperation in planning improved considerably among the producing, home and foreign trading, the cooperating and user enterprises. Mutual information was better than earlier (but it was far from being fully satisfactory). Regrettably, the exchange of information was usually restricted to the quantities of commodities to be delivered; technological requirements and possibilities, economic factors, the improvement of cooperation, the economic and organizational conditions of the mutual advantages were usually left out of the discussion. The completion of long-term (cooperation, capacity) contracts was rare, although these could have provided the basis of the plans and their realization. Especially the lack of more complex forms of cooperation between the producers of materials, semi-finished products (modules) and finished goods producing enterprises, and foreign trade enterprises was conspicuous. Such agreements could have resulted in an export development optimal for the national economy as well as mutually advantageous for the enterprises concerned.

The cooperation of the enterprises and the banking organs significantly improved during the planning process. The National Bank of Hungary helped the enterprises in obtaining information about the expectable financial conditions of development, provided positive help and criticised the enterprises concepts, as regards their soundness from the economic and financial aspects. In the period of planning the bank also undertook

crediting tasks for several years, or, if certain conditions were satisfied, the bank promised to grant the necessary credits. The bank, of course, could not undertake unconditional crediting liabilities for the whole plan period, as a more exact knowledge of the conditions and a more specific elaboration of the concepts are needed for decisions concerning developments to be implemented after 2–3 years.

Cooperation is planning between the enterprises and the councils significantly improved and was also extended. On request from the local councils, the enterprises gave information concerning the features of their plan concepts which would have consequences for the elaboration of the plans of the councils or regional plans; they also took an active part in the regional coordination of the plans of the councils. Cooperation between the enterprises and the councils proved useful in the solution of certain allocation and labour problems, in harmonizing the construction of child care institutions, housing and public utilities. Cooperation was sometimes hindered as certain councils asked for information too early or too late, and in some instances their contribution of information and consultation was too little to help the planning work of the enterprises. It was also found sometimes, that certain, especially nation-wide enterprises and trusts, neglected the information of local councils, especially the thorough discussion in time of subjects that would have been of mutual interest.

The preparation of the medium-term plan activated a wide range of high and medium level executives, the technological and economic specialists of the enterprises. A special strain was developing in the planning sections. Planning itself greatly contributed to the extension of the knowledge of these executives and specialists, and, at the same time, made it possible to utilize this knowledge in the interest of the whole enterprise. However, there were instances, especially in large, complex enterprises with many plants, in which the opinion of a part of the technological and economic specialists was not sufficiently solicited and utilized.

The preparation of the plan was an important event also for the enterprise collectives. The greater part of the enterprises realized that a thorough and regular information of the employees will result in their forming and voicing an opinion of the economic goals of the enterprise, plant or shop and of how these can be realized, especially with respect to questions related to incomes and social care. It was a positive feature that the party and trade union organizations took a very active part in the debate of the plans almost everywhere. This significantly expanded the social basis of planning and provided great help for the economic management,

At certain enterprises the involvement of the party and trade union organizations in the planning process was restricted to the leading bodies of these organizations. At many places, the methods and forums of involving wide circles of employees into the planning process have not yet been developed. In many instances there were but formal solutions, only giving an appearance of shop floor democracy. Discussion of the plan concepts of the enterprise in wide circles of the employees may contribute to a better knowledge of their tasks, a better exploitation of reserves and of the way of their utilization, even if these debates do not result in a modification of the content of the plan concept.

These discussions might also solicit suggestions whose realization may create a better atmosphere of workplaces, or may even facilitate a more rational achievement of the goals. The enterprises have not yet satisfactorily availed themselves of such opportunities.

In accordance with the regulations of the law on national planning, the plans were approved by the (general) manager in the case of enterprises, and by the general assembly in the case of cooperatives. It occurred in a few instances that a formal approval of the plan did not take place.

Although the guidelines issued by the National Planning Office contained appropriate recommendations, the practice of plan approval did not develop satisfactorily. In the case of most enterprises a whole complex of planning computations was approved as a plan: and, in certain cases, it was even ambiguous what the approved plan actually contained. The principle that in the document approved as a plan the most important economic and social targets of the enterprise as well as the means and measures of their realization should be consciously underlined (and not with a fake exactness but in the form of indicators established between limits, and qualitative tasks) was followed only in a few enterprises. The multitude of 'targets', defined with exaggerated exactness, often dealing also with details of secondary importance, will hardly provide a basis for a later evaluation of how the enterprise has fulfilled its plan. Such plans are inappropriate for accommodating the unavoidable changes in the factors and conditions affecting the management of the enterprise. At such enterprises, however, where the content of the approved plan was devised with a more 'open' character, also accounting for the changes in conditions, the plan can provide a more reliable and stable basis for management.

It should be regarded a considerable advance in planning that the majority of the enterprises elaborated measures in the fields of technological development, organization, labour management, stock control etc., serving the realization of the plan objectives. Unfortunately, in some cases the plans of the measures to be taken are separate from the plan of the whole enterprise, they are not attached to it closely enough and sometimes they are also independent from one another. Also a proliferation of plans of action of different kinds was found (often on the initiative of the control organs). It must be emphasized that the enterprise plans cannot dispense with measures to be taken in order to realize the targets, defining the concrete tasks of the sections of the enterprise. However, red tape in action plans, thus, their discrediting should be avoided by all means.

The approved plans reflect the aims of the enterprises generally well and they are suitable for mobilizing the enterprise collectives for a dynamic activity in harmony with the objectives of the national plan. The objectives contained by the enterprise plans are usually realistic, they are more or less well founded from the aspects of both the available means and planned measures; and the justifiable corrections during implementation of the plan can be based on them by taking into account more fully the actual conditions.

It was also found, however, that certain important targets of some enterprise plans, were 'distorted'. This was partly related to the fact, or at least, to the expectation of the enterprises, that the plans would not be used for what they were intended. The enterprises took into account especially the possibility that they might obtain preferential treatment on the basis of their plans, or they could avoid certain restrictions. For instance, the enterprise hoping to get state assistance or preferential wage taxation tended to underestimate their expected own resources, while those which wanted to found their credit request tended to overestimate their expected creditworthiness. It was not incidental that unrealistic increases in employment were planned in those industrial branches and/or regions where the responsible organs had stressed plans of 'labour

reallocation': giving perhaps, rise to illusory hopes. The enterprises concerned tried, thus, to reason in a way that this 'reallocation' should be made in their favour and not at their expense.

It must be regarded a weak point in the plans that income reserves were planned only exceptionally since it was feared that these would provide a basis for an individual withdrawal of incomes. As the majority of the enterprises realized the necessity of such reserves, they often solved the problem by consciously underestimating the realization of incomes. However, this reduced the mobilizing power of the enterprise plans for the collectives. In other cases, the plan of the enterprise was closed with a negative balance of resources, which, in turn, showed unambiguously that either the resources were underestimated or utilization was planned unrealistically high.

The above supports that the organs of economic control have to realize consistently the following two principles concerning the plans of the enterprises:

1. The plan of the enterprise, as in the past, cannot provide the basis for state decisions involving preferences or restrictions. If such decisions seem necessary, the decision must not consider the targets of the enterprise plan but the factors affecting the development of the enterprise and the thorough analysis of enterprise management.

2. The economic operation of the enterprise must be judged by the control organs not only on the basis of fulfilment of enterprise plan of the enterprise, but on that of the actual economic activity, especially the exploitation of resources, the intensity and efficiency of work in this field. (An element of this evaluation may be, of course, the harmony between the planned and the realized activity.) This should be underlined the more because the practice of evaluating the work of the Hungarian enterprises on the basis of the fulfilment of the plans has spread recently, which might revive the discarded practice of drawing plans that can be fulfilled easily and which lack the power to mobilize.

The content of the enterprise plans

After the medium-range plans of the enterprises have been prepared, their most important targets were aggregated and evaluated. The following principles had to be observed in the evaluation:

1. Aggregation of the enterprise plans is not intended to give a 'critique' of the national plan. On the basis of the enterprise plans the reality of the objectives of the national plan can be neither proved nor disproved. Realization of the five-year plan for the national economy is secured not only through the regulating system introduced for its realization within its framework or through the state measures already taken, but also through the annual plans, the operative regulation and control. It is obvious that the plans of the enterprises could not take into account the latter. At the same time, the plans of the enterprises, the objectives set in them might serve as good indicators of what elements, tasks of the national plan need special attention in the process of realization, at what points the efficiency of economic control should be improved.

2. An exact correspondance between the aggregated targets of the enterprise plans and the national plan, or even their equality with the computations of the latter is not a measure of the correctness of the enterprise plans, nor of harmony between the national plan and the enterprises plans. The enterprises will encounter many effects in their

activities during the plan period, through the already mentioned annual plans and the operative economic control on the one hand, and through the unforeseeable or unexpected changes in economic conditions. All these may either hinder, limit or facilitate and help the activities of the enterprises and increase the pressure towards improving the efficiency of economic activity. Thus, in fact, it is hardly probable – and there is no such intention – that the medium-term plan of *every* enterprise be realized in line with the present knowledge. From this it also follows that the harmony between the economy-wide plan and that for the enterprises is proved not by a numerical equality of the targets; the important requirement is that the enterprise plans reflect the economic policy objectives, the main development tendencies and concrete decisions set down in the plan for the national economy, that the enterprises strive actively for the realization of a corresponding dynamic and efficient development.

Setting out from these principles the medium-term planning in enterprises and co-operatives may be judged to have been successful on the whole. The plans contain the main economic objectives and tasks comprised in the Act on the fifth five-year plan and the government decree concerning the implementation of this Act as well as the ways and means necessary for the realization of these objectives and tasks. The concepts of the enterprises concerning the increase of production, and their aims at dynamic growth are well founded. The majority of economic units aim at a faster increase of labour productivity at a faster development and modernization of the production structure, at increased capacity to produce exportable goods, at improving the efficiency of economic activity.

At the same time, many enterprises reckon with material-technological, financial, and labour resources for the realization of their plan targets that are not in harmony with the realistic possibilities. They expect to resolve the actual or supposed insufficiency of their material resources by availing themselves of state assistance. They plan to realize their production targets through a larger than justifiable increase of fixed assets and labour. This indicates that the basic requirement of the national fifth five-year plan, that economic efficiency has to be improved to a greater extent than formerly, is not sufficiently reflected by the enterprise plans. In their activities aiming at the realization of their plans the enterprises have to strive for the foundation and realization of an improvement in efficiency exceeding the planned increase.

It is a favourable feature of the enterprise plans that they envisage a somewhat faster increase of *production* than does the national plan. This is shown by the following data:

Table 1
Growth of production between 1976–1980
(percentage increase on 1975)

	according to the national economy	plan for the enterprises
Industrial enterprises	33–35	36–37
Construction enterprises	34–36	38
Agricultural large-scale farms	27–28	36
Transport and communications enterprises	26–27	28–29

The production targets for the most important products also equal to or exceed the targets in the national plan or in its detailed computations. It is worth mentioning that the production targets of the enterprises exceed the national ones by less than they did five years ago. This indicates, on the one hand, that the unfounded elements diminished in the enterprise plans, but it also underlines that the national plan is stricter this time in this respect.

It may be concluded from the plans that the enterprises understood and accepted the aims of the national plan concerning the structural changes in sales. A faster increase of export sales is also planned by the enterprises, especially of western exports. The producing and home trade enterprises generally envisage, correctly, the full satisfaction of domestic demand for their products, while they estimate that a growth in this demand will be somewhat higher than the targets of the national plan. It is very favourable that both the producing and the foreign trade companies plan to increase exports to the rouble area in conformity with the interstate agreements.

The producing and foreign trade companies plan a dynamic growth of western exports, but the targets of the producing enterprises lag behind the computations of the national plan to a small extent, while this difference is greater in the case of the foreign trade companies. This also directs attention to the tasks ahead in the foundation of increasing western exports in production as well as in foreign trade, in technological development, in accelerating the transformation of the production structure, and in the improvement of marketing activities.

It deserves special attention that the enterprises took into account only a small increase in their sales prices to western markets. The temporary halt in the inflationary increase of prices in the first half of 1976 must have played a significant role in this. Later a more dynamic price increase may be expected; however, for attaining an increase in export prices at least equalling, and in certain fields surpassing, the level of general price increases both the supply terms and the marketing activity must be improved.

The underestimation of export prices was also reflected by the fact that the enterprises planned the production value at current prices, sales and thus, profit below the realistic level.

The planning of *profit* was characterized by cautiousness in other respect as well. This was, on the one hand, an understandable reaction of the enterprises to the relatively wide extension of individual financial regulation; the enterprises aimed at supporting their requests for various subsidies also in this way, and tried to avoid possible individual withdrawals of funds. This, however, was not justified; not only because the enterprise plan is not relevant from this aspect, but also because the economic regulators had been determined for several years, consequently, the fruits of a better enterprise management will not be withdrawn. The other reason for cautiousness was that the enterprises formed a reserve for the purpose of future uses of income in this way — though the form was not correct, it was correct as regards substance.

Plans regarding the utilization of the part of profit retainable by the enterprise was on the whole thorough. However, in a few enterprises signs of unsatisfactory foresight were found. Certain enterprises planned a smaller increase in stocks than necessary, thus, they planned to spend only a small part of their financial resources on the replenishment of funds for working assets. Planning of the sharing fund was characterized by due caution;

the enterprises generally avoided to undertake unfounded liabilities regarding the increase of personal incomes. In this context, the enterprises planned to spend a somewhat greater part of net profits on development than envisaged by the national plan. As a thorough preparation of investments requires longer time, it cannot be questioned theoretically that if profits are planned cautiously, principally personal incomes must be planned with greater safety. However, the enterprises have to bear in mind that if their profits increase only at the planned rate, they will not be able to obtain credits from the bank for covering the increase of working assets, nor will they be able to press for wage preferences at the labour organs. For this reason, when they want to use their resources for beginning new investments, they will have to revise the profit realization and utilization figures, in order to secure the necessary financing of the working assets and personal incomes.

The enterprises planned *investments* at a level generally 10 per cent higher than the target of the national plan. This is the weakest point in the enterprise plans, the more so, as the additional investment is largely planned for the first years of the plan period. A part of the enterprises, unfortunately sometimes with the assent of the ministries, planned to realize large state investments not contained by the national plan, or envisaged only for later years; they also reckoned with more state assistance than possible. The enterprises also intend to borrow more from the banks than the target in the national plan. This is advantageous from the aspect that the bank will thus have the opportunity to select the more advantageous credit applications. It is wrong and shows an insufficient flexibility of planning that even enterprises for which the obtaining of state assistance or credits was uncertain, failed to prepare their plans in several alternatives but founded them exclusively on this uncertain basis.

Such planning of investments requires the state and banking organs to keep consistently to the targets of the national plan and not to yield to pressures towards creating purchasing power in the investment market beyond the plan. Thus, enterprises have to take into account that a part of their investment plans cannot be realized, or can only be realized to a lesser extent or later. As this might affect production capacities as well, means of more efficiently exploiting the given resources must be revealed in time, and, in certain cases, revision of the production targets may prove unavoidable.

The enterprises plan to use more *labour* in the industry and in the agriculture than envisaged by the national plan. Although the difference is not great, significantly less than that five years ago (only 1.5–2 per cent for 1980 in the industry), it indicates that certain enterprises (especially in the engineering industry) are still in the belief that overestimation of employment can bring some advantage.

The increase of productivity is planned by the enterprises at a level corresponding to the national plan. To realize this improvement, they usually plan to take various technological development and organizational measures. However, in some cases, the planned plant and work organization measures are rather spectacular, often formal. Only in a few cases do they concentrate on the modernization of production processes at small expense, or on the simplification of administration. Many enterprises have plans for the mechanization of material handling, for the improvement of technological processes, and, in this way, for the saving of labour, but these are often premature and necessitate further technical elaboration.

In accordance with what has been said above about profit and its utilization, the enterprises planned the increase of *earnings* with safety margin, close to the lower limit, of the increase contained by the national plan. Of course, centrally decided wage increases could not be taken into account. In view of this and the expectable overfulfilment of the profit targets, the planning of earnings may be regarded as satisfactory.

Social plan as an integral part of the medium-term plan was prepared by the enterprises for the first time. In this they planned the improvement of the working conditions, assistance to the child-care facilities and to housing construction, improvement of the cultural and sporting opportunities etc. in harmony with their financial means. The trade unions also performed an active and fruitful work in the thorough elaboration of the social plans.

The survey and evaluation of the enterprise plans shows that the enterprises understood the basic objectives and interrelations of the national economic plan embraced them, and tried to found them with their own plans. Judging from the plans, the planned direction of the enterprise activities generally corresponds to what the economic policy of the fifth five-year plan sets for Hungarian economic development, but the assertion of the requirements towards efficiency and quality necessitates further, continuous work.

A general revision of the medium-term plans of the enterprises is neither necessary nor opportune. However, it may turn out in certain cases that the enterprise took into account the market possibilities, conditions and requirements, the available production factors with unsatisfactory circumspection, or that unforeseeable, significant changes will take place in these. In such cases it would be a mistake to interpret the plan rigidly and stick to it in its original form. The manager of the enterprise has the opportunity and right to modify the plan if necessary. Therefore, when the conditions on which the preparation of the plan was based undergo a significant change, it is necessary that the enterprises themselves provide for a corresponding modification of their plans and for an updating of the data contained. It seems, though, that this will be necessary only in a relatively few cases.

The main objective is to improve the foundation of the enterprise plans, within this, to improve efficiency and to concentrate on increasing western exports so that these become more and more an action program of the enterprises. Minor changes in the factors affecting the economic development of the enterprises are to be included in the annual plans. These plans and their fulfilment play a decisive role in the realization of the fifth national five-year plan and of the enterprise plans as well.

РЕЗУЛЬТАТЫ И УРОКИ СРЕДНЕСРОЧНОГО ПЛАНИРОВАНИЯ НА
ПРЕДПРИЯТИЯХ В ВЕНГРИИ

А. БАЛАШША

В Венгрии свои планы на период 1976—1980 гг. предприятия и кооперативы разрабатывали и утверждали самостоятельно, учетом целей экономической политики и хозяйственных задач, определяемых в народнохозяйственном плане.

В статье в целом положительно оценивается деятельность государственных органов в связи с подготовкой и проведением работы предприятий по планированию. В то же время эти органы народнохозяйственного управления в некоторых случаях прибегали и к не совсем правильным методам; автор указывает на причины этого и в чем это выражалось. В статье анализируется, каким образом органы государственного управления помогали предприятиям в разработке методов планирования. Дается оценка положительного и отрицательного опыта консультаций руководителей предприятий и министерств относительно соображений предприятий и министерств относительно соображений предприятий по планированию.

Автор анализирует работу предприятий по разработке методов планирования и организации самого процесса планирования. Рассматривается опыт, приобретенный в ходе развертывания стратегии предприятия и концепции плана, а также окончательной его отработки. Дается оценка деятельности предприятия по изучению рынка, сотудничеству предприятия в области планирования, а также контактам предприятий и банковских учреждений, предприятий и местных советов. Рассматривается организация работы по планированию на самом предприятии. Анализируется практика утверждения планов предприятий, критикуется отсутствие надлежащей гибкости и наличие в некоторых случаях „искажений” в этих планах. Автор делает определенные выводы о том, как должны государственные органы относиться к планам предприятий. Даются рекомендации относительно дальнейшего совершенствования работы по планированию.

Рассматривая содержание планов предприятий автор отмечает, что они в основном соответствуют народнохозяйственному плану. По сравнению с народнохозяйственным планом, предприятия стремятся к несколько более динамичному росту своего производства и планируют быстрые темпы расширения экспорта. Намечается соответственное повышение производительности труда. Некоторая осторожность проявлялась в отношении планирования прибыли и личных доходов. Для достижения планируемого прироста продукции предприятия намечают несколько больший объем капитальных вложений, чем это предусматривается в народнохозяйственном плане. Автор приходит к выводу, что в ходе реализации среднесрочных планов при разработке годовых планов предприятия должны стремиться к более высокой эффективности, чем это намечалось в их планах. Предприятия должны гибко подходить к наметкам среднесрочных планов и принимать во внимание быстро меняющиеся экономические условия.

E. HUSZTI

SOCIAL AND ECONOMIC IMPACT OF INFLATION IN HUNGARY

The author examines inflation in Hungary beginning with 1949 and states that – except for deliberate changes in the price system and the effects of the counter-revolution – Hungary compares favourably in the international field. Nevertheless, owing to her open economy, the country must put up with a slow inflation, even if its bad effects can be warded off thanks to planned economy and successful monetary policy.

Besides the substance of money, the most frequently searched and disputed theme of finances is perhaps the analysis of factors which determine and influence the purchasing power of money. Nowadays there is an especially great interest in the changes of the external (foreign) and the internal (domestic) value of money, because depreciation of the monetary unit, in other words inflation, is a world phenomenon.

Changes in the value of money can be always examined through some national currency, under given historical and economic conditions. It is almost natural, that there were born as many different explanations of inflation as many analyses of currencies were carried out in different countries. Thus, when analysing the inflation of any currency, the given socio-economic background cannot be neglected, an opinion can be formed in merit only by taking it into consideration. The inflation-analyses emphasize usually those factors as causes which have contributed the most to the depreciation of the currency in a given country.

The question is often raised, whether it is necessary to examine scientifically the inflationary phenomena in a socialist economy. An affirmative answer was given by life, because the inflationary phenomena may cause difficulties and problems in all areas of human relations.* Namely inflation, if it gets into its developed phase, entails grave social and economic consequences which every state tries to avoid. But the problems caused by inflation may appear already in the initial stage of inflation and disarrange the balance of family-household. They may also cause frictions between enterprises and workers, the population and the government, etc. Surely, first of all the governments are made responsible for inflationary price rises, and asked to put an end to them.

But *inflation* can be traced back to deeper economic causes, is not a cause, but a consequence of problems which are manifest in real economic processes. The inflationary process usually does not appear suddenly and unexpectedly, but as a result of gradual development. This graduality can considerably be aided by measures applied against the acceleration of the inflationary process and by anti-inflationary efforts, which may

*There are more and more publications discussing the effect of inflationary phenomena on socialist social conditions. They often use the expressions: "deferred demand", "unsatisfied demand", "non-voluntary savings" etc., but more and more authors call these symptoms inflationary phenomena.

hinder the development of inflation for a shorter or longer period, and can slow down its growth. But if these measures are not aimed first of all at solving the tensions in the real economic processes, inflation can become even stronger.

Inflation, which means depreciation of the unit of currency, is a complex economic and social phenomenon, the substance of which is that the price level rises at an accelerating rate as a consequence of effects stemming from money supply, and inflationary mentality becomes dominant in the whole economy.

It follows from the above that, although there is a significant relationship between the purchasing power of the monetary unit, the depreciation of its value and the increase of prices and the price-level, the sign of equality must not be put between every price rise and inflation. We make this mistake very often, although a part of the increase in prices and the price level can not be regarded as having an inflationary character. The price increase does not have an inflationary effect, if it is proportionate to higher quality, nor can an increase of the price level be regarded as inflationary, if it is connected with the appearance of new articles, or it means a shift in demand to more valuable products.

It is very important to emphasize, that the inflationary phenomena manifest themselves not only in price rises, but also in an inflationary mentality. Although the inflationary mentality has not a direct price raising effect, it can strengthen the inflationary process in an indirect way. Sometimes, inflationary mentality can "generate" an inflation even in such cases when its objective causes have already ceased to exist.

Inflationary mentality appears first of all in inflationary expectations. This means that the economic subjects project for the future the rate of inflation experienced by them in the near and far past and assume that the rate of inflation (or its acceleration) will be similar in the future as well. Inflationary expectations lead to inflationary behaviour. The population reduces the accumulation of money, savings are shifted to forms which provide protection against inflation.

Inflation, as well as the purchasing power of money, is measured by the reciprocal of the general price-level.* It is a general problem that not every country has official price statistics and even if these statistics are available, they are of highly different quality in different countries, therefore they are very difficult to compare. The questions will be dealt with in detail.

The inflationary processes or phenomena are due both to the external environment (exogenous factors) affecting the country in question and to the internal economic and social situation (endogenous factors).

Directly after World War II a war-inflation raged in many countries of the world. After stabilization of the currencies in individual countries, economic growth became generally more and more balanced, and the creation of an institutionalized framework for international monetary relations (Bretton-Woods etc.) entailed a significant expansion of international economic relations. The illusion was dominating that the capitalist prosperity is developing favourably and free from crises.

The capitalist states increasingly interfered with economic life in the interest of balanced economic growth, full employment, stability of the currency and equilibrium of

*If, for example, the price index rises from 100.0 to 112.5 per cent, this is equal to an 11.1 per cent decrease in the value of money (because $100.0:112.5=0.889$).

the balance of payments. But in formulating their economic policies the leading circles of the capitalist states were driven to a rather narrow path by the "two-headed monster", the phantom of inflation and of crisis. So most capitalist governments soon sacrificed stability of the currency on the altar of fast economic growth and relative full-employment. With giving up stability of the currency, as the "smallest" sacrifice, the slow inflation of national currencies gradually began. More and more western economists said that the questions of monetary stability must not be interpreted according to the earlier "inflexible" points of view, but importance has to be attached to a "relative stability" of money. In this way the systematic decrease in the value of money was not only accepted, but considered as one of the stimuli of accelerating economic growth as well.

The rein to influence money, at the first called "directed" or "manipulated" money, gradually fell out of the hands of the financial authorities. This is indicated by their gradually changing conception about the "acceptable" measure of inflation. Until the price rises did not exceed 2–4 per cent annually, the depreciation process of the value of money was called "creeping inflation". For a long time it was supposed that the rate of inflation could be kept at this low level.

But the rate of inflation of national currencies increased, the regulation of money supply got more and more out of control by the financial administration. Inflation began to live an independent life and changed to higher and higher speeds. In the next phase the so-called "galloping" inflation was born, meaning an annual 10–25 per cent rate of inflation. At the same time, the differences in inflationary rates among individual countries increased and the internal purchasing power of currencies sharply separated from their fixed international rates of exchange.

Nowadays we are eyewitnesses of a further acceleration of the inflationary process, which is not always accompanied by dynamic economic development any more. This kind of inflation is called by experts "stagflation". In 1975 general inflation was already accompanied by an economic recession whose right name is "slumpflation".

Accordingly inflation — similarly to the ghost let out of the bottle — already disobeys the intentions of financial administration, even resists them. Even the key currencies could not escape inflation, which — interwoven with other grave economic difficulties — made the developed inflationary symptoms dominant in the form of monetary crisis, in the international monetary system, too. Thus, by reacting upon the inflation of national currencies, became an additional factor in it.

These processes have been still strengthened by the changes experienced in the last few years, deriving from the explosion-like increase of prices of primary energy and the most important materials.

The situation of capitalist world-economy, the crises of the international monetary system did not leave the economy of the socialist countries unaffected, so neither that of Hungary. Therefore, both at present and in the future as well, we have to reckon with impulses from the capitalist world economy. First of all we have to learn to live together with the inflation of the capitalist world, as an unavoidable external factor. In fighting it only modest and transitory results may be expected.

The effects ensuing from the crisis of the capitalist international monetary system were generally disadvantageous to the Hungarian economy. What can be considered as positive

is that, because of the depreciation of western currencies, the real value of our debts in them decreased.

The disadvantageous effects of the inflation of the capitalist currencies assert themselves through the increase of the import prices, affecting costs at every stage of processing and the profitability of manufactured goods. Higher import prices, increasing costs etc. claim a growing money supply for a smooth transaction of turnover. To compensate for the decreasing profits the budget had to allocate considerable subsidies, because this was the most obvious way to ward off disadvantageous effects. Thus, exchange rate policy and a system of budgetary subsidies (dotations, grants, compensations) obtained increasing importance in the fight against the external inflation raising our prices.

Similarly, the increase of export-prices in capitalist markets has a raising influence on money circulation, unless the increase of prices is compensated by an adequate decrease of subsidies (tax refunds), collection of the inflationary profit surpluses through taxes, revaluation of the domestic currency, or by some combined application of the methods mentioned.

Accordingly, world inflation affects the economic life of the capitalist countries in other ways than the economic processes in Hungary. In the latter an increasing role is played by financial policy, and within it by the budget, in warding off the mentioned inflationary pressure. But the budget functions in close cooperation with the bank-of-issue-policy and a determined division of labour develops between them.

All these, naturally, do not mean, that depreciation of the internal purchasing power of our home currency could be denied. In fact, it looks sure that before 1975 a smaller part of the depreciation in the value of money could be explained by the inflationary pressure affecting our economic connections with capitalist countries, the bigger part of it can rather be traced back to internal economic causes.

Let us examine the history of the forint currency as reflected by its purchasing power. As there is no "general price-level index" available for Hungary either, for want of this we have chosen the method that the yearly aggregates of the national income (MPS) and gross national product, respectively, have been interpreted at current prices as value indexes and those at constant prices as volume indexes. Since the value index is equal to the product of the volume index and the price index, the price index can be easily determined. We have to mention, that a somewhat more exact picture was attained from the price index based on data of the gross national product. Yet, the alternative computation was necessary because the data of gross national product are available only from 1960, while we got much longer time-series from the data of national income starting with 1949.

The more essential decreases in the purchasing power of the monetary unit and the considerable increases of the price-level actually coincide with those problems of our economic life, which may be well-known to readers from other publications. Let us review the background of economic history to the changes in the purchasing power of the currency.

Though we began our analysis with 1949, we have to remark that up to that time the forint currency lost significantly from its value compared with its purchasing power as of August 1, 1946, its date of introduction [1]. According to some statistical sources the

purchasing power of the forint currency – based on prices of articles sold in nationalized shops and on the free-market – decreased approximately by 40 per cent from the stabilization till 1949. There was a similar price rise in industrial and agricultural prices, and only services were not much affected by the price rises.

Table 1

General price index and the purchasing power of a unit of currency between 1949–1975

Year	Index numbers of			Purchasing power of a unit of currency:	
	national income at		general price-level	1	
	current prices	constant prices		price index	
				based on national income (MPS)	based on gross national product
1949	100.0	100.0	100.0	1000	
1950	122.8	120.6	101.8	0,982	
1951	215.6	139.9	154.1	0,649	
1952	211.6	137.6	153.8	0,650	
1953	220.6	154.4	142.5	0,702	
1954	226.0	147.2	153.5	0,651	
1955	250.1	159.3	157.0	0,637	
1956	218.9	141.2	155.1	0,645	
1957	282.3	173.7	162.5	0,615	
1958	291.7	183.4	159.1	0,629	
1959	335.5	195.4	171.7	0,583	
1960	390.0	213.5	182.6	0,548	1,000
1961	411.8	226.8	181.6	0,551	1,002
1962	432.7	237.7	182.1	0,549	1,001
1963	453.9	250.9	180.9	0,553	1,006
1964	475.7	263.0	180.9	0,553	0,999
1965	467.1	260.6	179.3	0,558	1,013
1966	520.0	287.1	181.1	0,552	0,999
1967	567.1	310.1	182.9	0,547	0,993
1968	609.6	329.4	185.1	0,540	0,937
1969	687.4	353.5	194.5	0,514	0,915
1970	735.5	361.9	203.2	0,492	0,894
1971	795.4	386.1	206.0	0,485	0,876
1972	862.8	405.4	212.8	0,470	0,849
1973	955.7	435.5	219.4	0,456	0,828
1974	1027.9	455.6	225.6	0,443	0,817
1975	1105.9	472.9	233.8	0,428	0,778

Sources: 1) Statistical yearbooks 1946, 1949–1955, and then annually up to 1975.

2) *A nemzeti jövedelem és a lakosság jövedelme, 1958.* (National income and personal incomes in 1958.) Központi Statisztikai Hivatal.

3) *Népgazdasági mérlegek 1960–1970.* (National accounts 1960–1970.) Budapest, 1971. Központi Statisztikai Hivatal.

4) *A nemzeti jövedelem hosszúsoros indexeinek felülvizsgálata 1938 és 1950–1965 között.* (Revision of the long time series of national income between 1938 and 1950–1965) Budapest, 1967. Központi Statisztikai Hivatal.

Actually, behind the price rises changes in relative prices and a considerable rearranging of the new price system created on August 1, 1946, were hidden. At the stabilization there had been a significant gap between the prices of agricultural and industrial products and there was a strong effort from the side of agriculture to eliminate it. The agricultural prices — although rising faster than industrial prices — entailed a rise in industrial prices. On the basis of social changes having occurred in the meantime and the fulfilment of the first three-year plan we may suppose that by 1949 there emerged a price level and price-structure roughly corresponding to the economic structure of Hungary at that time.

The expectable development of the period after 1949 was interrupted by an exaggerated raising of the targets of the first five-year plan, and the well-known economic difficulties stemming from this were expressed by a price- and wage reform on December 2, 1951, which considerably decreased the purchasing power of the unit of currency by a 40 per cent rise in retail prices. As wages were increased only by not quite 20 per cent, this entailed a considerable decline in personal incomes. The economic tensions in respect of prices appeared in the form that the agricultural price-scissors became industrial price scissors, and this situation existed essentially till 1955. However, the general price-level increased only to a small extent. The gradual, though systematic increase of the agricultural procurement and state purchase prices tried to compensate for the high industrial prices which remained unchanged, in spite of the fact that, because of the stagnation of industrial production, an increase of industrial prices might have been expected. The price-reductions of some consumer goods contributed to the keeping down of the price-level, too. According to the then prevailing view this was considered as one of the important instruments in raising living standards.

The unfavourable trend of prices in 1957 was produced first of all by the counter-revolutionary events. On the other hand, in 1959–1960 the purchasing power of the monetary unit diminished under the effect of certain producer-price adjustments.

The general price-level did not change essentially till the introduction of the new economic mechanism, even the producer-price adjustment executed in 1963–64 had a price reducing effect.

Under the new conditions a part of the price restrictions was lifted, which naturally caused freer price movements, namely upwards. This period is already characterized by the fact that prices and wages are — in accordance with the accepted rules of the game — inflexible downwards, that is, we can really count only on their increase. Within the gradual rising of the price level, there was a stronger than average movement in 1972, probably in close connection with the investment boom.

The price rises caused by the production and distribution of the material goods as well as those released by monetary effects caused inflationary symptoms in various periods of our economic development. These symptoms indicate two main types of inflation, the demand-pulled and the cost-pushed inflation.

In spite of the fact that in recent years, as a result of increase in the prices of imported goods, there is a cost-push element, demand-pull is present, too. The latter is fed partly by excess distribution, as domestic consumption is systematically higher than the national income produced, partly it is due to the fact that we have not created a clear division of labour and coordination between the economic tasks and the proportions and flow of money funds necessary for them.

If these conditions are taken for given, not even a strictly controlled price system provides a solution — as has been experienced — because in such case the inflationary pressure appears in a modified form. Namely, if prices are moving more freely, the excessive effective demand will be consumed by price-rises, but in case of controlled prices the shortage of goods will be increasing and thus a part of the money will become redundant and unspendable.

As a consequence of the dual character of the causes creating inflationary phenomena — meaning demand and cost effects — the results get extremely interwoven and it is very difficult to separate the purely demand factors from the purely cost factors. But in some respects the situation seems to be rather unambiguous.

Within the inflationary effects coming from the demand side an unjustified increase of investments and the prolonged completion of investments in process as well as the shortages in the supply of consumer goods take the first places. The solution lies in the setting and strict observance of adequate proportions between accumulation and consumption.

The symptoms of cost-pushed inflation require more detailed analysis. In any case we have to strive after an optimum use of the scarce factors of production. Even if we disregard the cost raising effect of import prices already mentioned, there are several internal factors which have price-raising effect.

First of all the unsatisfactory rearrangement of economic structure must be mentioned which limits the allocation of resources. Year by year we make considerable investments without stopping the unnecessary or uneconomic production in the economy. This, instead of easing the present main constraint of economic development, i.e. labour shortage, even increases it. This makes labour significantly more expensive, and stimulates such “reallocation” of the available manpower which is based on the promise of higher wages. But this involves a gradual rise in the wage level without essentially increasing the possibilities of production.

The wages paid in this way confirm the social necessity of work, but behind it consumer goods are not produced proportionally with personal incomes, which means that money surpluses and forced savings emerge.

Accordingly, the maintaining of any uneconomic production involves not only excess costs for the economy, but the financing of the loss is a deduction from the already produced net social income.

As for social problems of the inflationary phenomena and inflationary mentality, these often start by drawing more exaggerated conclusions than the real economic processes justify. As a consequence, unjustified demand impulses may come about which lead to shortages also in such spheres where there would be adequate supply under normal circumstances. All this naturally becomes manifest when the resulting depreciation of the purchasing power of money is greater than the so-called “acceptable degree”. But the “acceptable degree” cannot be shown by a single statistical figure, because it is different in various countries and strongly depends on established social habits.

Evidently, in the underdeveloped or developing countries the effects show in another way than in the medium or highly developed countries. The effects show themselves again in another way depending on the social system, because in the socialist countries — for example in Hungary — inflationary mentality and psychosis appear only in extremely

strained and rare situations. It is necessary to deal thoroughly with the mentioned questions, because the efforts towards the solution of the possibly appearing tensions are usually the same as the objectives to assure balanced economic development. This statement of ours is not weakened, but rather confirmed by the fact, that the depreciation of the purchasing power of our currency did not surpass the so-called "acceptable degree", except for the price and wage adjustment in December 1951, and the period directly following the counter-revolutionary events in 1956. This is proved by the absence of inflationary mentality in our country.

Let us review in support of our statement some figures by the help of which we show the velocity of money circulation, the changes in the consumer price index and the index of per capita real income and the personal savings based on data of 1960–75, and the industrial producer price index based on data of 1967, respectively.

Table 2

Some important indicators of money circulation, prices and incomes, 1960–1975

Years	Velocity of money circulation money circulation	Industrial producer price-index* 1967 = 100	Consumer price-index	Index of per capita real income	Yearly personal savings in per- cent of yearly cash-income
	money supply		1960 = 100		
1960	17.7		—	—	1.0
1961	17.3		100.9	100.8	2.1
1962	16.9		101.4	104.7	3.0
1963	17.0		100.8	110.9	5.0
1964	17.2		101.2	117.3	6.0
1965	17.1		101.9	118.1	3.0
1966	17.7		103.1	124.1	3.0
1967	16.4	100.0	103.5	132.0	3.0
1968	15.3	105.9	103.9	140.3	4.0
1969	12.5	107.8	104.6	148.6	5.0
1970	12.4	110.3	106.0	159.4	6.0
1971	11.8	112.5	108.1	166.6	5.0
1972	10.6	114.2	111.2	171.8	4.0
1973	9.7	117.6	114.9	180.4	4.0
1974	9.2	121.5	117.2	190.3	4.0
1975	8.2	134.4	121.7	197.9	6.0

*The industrial producer price index has been published by the Hungarian Central Statistical Office beginning with 1967.

According to these figures the velocity of money circulation (deposits and cash together) instead of becoming faster, slowed down, partly because the rising rate of savings exceeded the increase of money circulation, partly because, beside changes in the organizational and technical factors of money circulation, the number of steps decreased where money mediated the continuous flow of goods. For example, before the introduc-

tion of the new economic mechanism there were considerable mergers of enterprises, and with the later elimination of some intermediate organs (as for example the wholesale trade in certain fields) the product now covers a shorter distance from the producers to the consumers, etc.

Confidence in money can be judged first of all on the basis of the behaviour of the population, in other words, whether the population saves, accumulates money or rather spends it. It clearly appears from the figures that, in spite of changes and fluctuations in the saving rate in some years, the propensity to save shows a growing tendency. Examining the 12 years from 1951 to 1962, savings were on average 2,2 per cent of the yearly cash-income, against 4,5 per cent in the 13 years from 1963 to 1975; accordingly, the propensity to save more than doubled in the second period. This was caused by the increase of real income, which was manyfold of the increase of consumer prices, and this favourably influenced the formation of personal savings. Considering that behind every percentage of savings a 6–10 per cent increase of the yearly cash-income is hidden, the absolute sum of personal savings indicates a strongly increasing process. From all this we can conclude that in Hungary a predominant part of savings is made with a predetermined purpose. Accordingly, a speedy spending of money is not typical; on the contrary, the accumulation of money serves to reach the pre-set aim of the consumer. The problem appears only if the saved amount can not be spent because of shortages in the supply of goods and it is thus transformed into forced saving. According to our computations, the sum of forced savings, thesaurisation, is not significant and means a comparatively short period. In other words, the spending of saved money is only temporarily hindered by supply.

Accordingly, the phenomena causing inflation can rather limitedly assert themselves in Hungary, because planned economy excludes spontaneity in most spheres of economic life. As a consequence, the increase of the general price level is limited, depreciation of the purchasing power of the currency is under control. In this a fundamental role is played by the facts that

- spontaneous price formation is rather limited, the price formation considered as free is possible in only a very thin layer of the economy;
- the greater part of the home market is regulated, according to our calculations more than 70 per cent;
- the budget makes considerable efforts at warding off the undesirable price rises;
- central bank policy strives to regulate purchasing power in its widest sense.

In spite of all these efforts the inflationary phenomena necessarily force their way in some areas of the economic life and assert their disadvantageous social and economic effects. The most important of these areas are perhaps the following:

1. A redistribution of incomes takes place
 - in favour of those enterprises which can shift their increasing costs onto consumers at the expense of other enterprises and the population;
 - in favour of small-scale producers and the self-employed at the expense of wage- and salary-earners;
 - in general, in favour of debtors at the expense of creditors;
 - in favour of the economically active population at the expense of pensioners, etc.
2. Personal motivation decreases or is pushed into the background.

3. The deficit of the budget is growing and is directly or indirectly financed by central bank credit which, on the other hand, can contribute to strengthening the inflationary tensions.

4. Inflation affects structural changes adversely, the increasing sales receipts might produce the illusion, that all products can be sold, all activities are necessary for the people's economy.

But we would be unfair if we examined the purchasing power of the forint only in itself and did not compare it with other currencies, because the forint currency holds its ground in all kinds of comparisons.

About the importance of creating harmony between the internal and external value of the forint currency several articles were published. These emphasize that the external value of the forint can only be stable if we also guarantee the relative stability of its internal purchasing power. On the other hand, the external value of the currency depends not only on the general price level but on its relations to the other currencies, as well.

Figure 1 shows the purchasing power of one forint, dollar and Swiss frank, based on gross national product, relative to 1960.

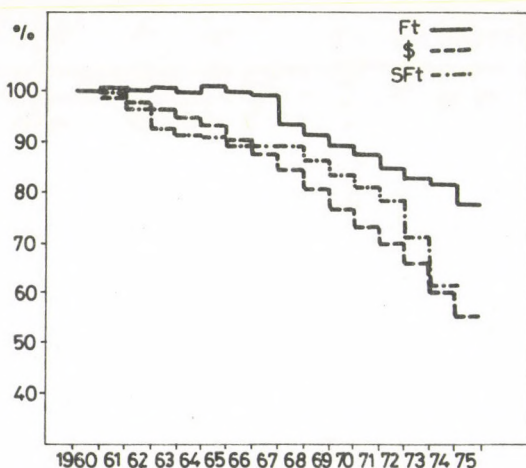


Figure 1. Changes in the values of currencies, based on GNP

If we compare the changes in the purchasing power of one forint, dollar and Swiss frank on the basis 1960, it turns out that the forint currency lost in purchasing power to a much smaller degree in the examined period than the two mentioned western currencies. But it is quite another matter how this fact is expressed by the changes in the rates of exchange, because in this very important foreign exchange policy decisions play a role, too.

The relative stability of the forint currency is favourable also in a wider comparison. In the monthly economic bulletin of the First National City Bank of New York, in September 1974, the Bank examined the purchasing power of the currencies of 15

industrial and 13 developing countries. We compared these averages with similar data of our country:

Table 3

Average annual rate of depreciation of the value of money, per cent

Denominations	1963-68	1969-73	1974
Industrial countries ^a	3.7	5.7	11.1
Developing countries ^b	3.6	6.0	18.7
Hungary	0.4	2.3	2.7

^aFederal Republic of Germany, Holland, Austria, Sweden, Union of South Africa, Switzerland, Belgium, USA, Canada, France, U.K., Italy, Yugoslavia, Japan, Finland.

^bVenezuela, Iraq, Iran, Peru, Mexico, Brazil, Turkey, India, Argentina, Zaire, Singapore, Indonesia, South-Vietnam.

Our analyses relating to the value of money also call attention to the fact that, in view of the world economic environment, we have to abandon the illusion of creating and maintaining a currency free from inflation. If we made efforts at any price, we would lose the advantages deriving from the depreciation of money and would be handicapped also in increasing our international competitiveness. But it is important that we maintain the relative stability of the forint currency and if it is possible, it should not perceptibly lose in value compared to the relatively least inflated convertible currency, which can be considered the most stable. But for safeguarding this a coordinated budgetary and central bank policy and such monetary instruments are necessary, which are suitable to support a policy aimed at effective monetary equilibrium.

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СОЦИАЛЬНЫЙ И ЭКОНОМИЧЕСКИЙ ЭФФЕКТ ИНФЛЯЦИИ

Э. ХУСТИ

Автор рассматривает социальный и экономический эффект инфляционных явлений на примере процессов, имеющих место в венгерской экономике. Кризис капиталистической валютной системы, процесса мировой инфляции рассматриваются лишь постольку, поскольку это необходимо с точки зрения воздействия на венгерскую экономику.

На формирование затрат и доходов венгерских предприятий влияние международных инфляционных явлений сказывается через повышение цен на импортные товары. Повышение импортных цен, рост затрат требуют все большего количества денег для бесперебойного обеспечения обращения. В парировании неблагоприятных воздействий большую роль играют госбюджет и, наряду с этим, активная политика валютных курсов.

Инфляционные явления, имеющие место в венгерской экономике, естественно, объясняются не только внешними воздействиями, но и внутренними экономическими причинами. В статье показана динамика общего уровня цен и покупательной способности денежной единицы, начиная с момента стабилизации форинта вплоть до наших дней. Автор указывает, что в уменьшении покупательной способности форинта налицо оба основных типа инфляционных явлений — инфляция спроса и издержек.

Автор указывает и на то, что наряду с давлением по линии повышения цен со стороны издержек налицо также и сильные импульсы спроса. Последние вытекают отчасти из систематического превышения внутреннего потребления над произведенным национальным доходом, и, с другой стороны, связаны с неудовлетворительной экономической структурой и относительно медленными темпами преобразования структуры. Различные эффекты, естественно, сильно переплетаются и очень трудно отделить чистые факторы спроса от чистых факторов издержек. В статье детально рассматриваются инфляционные явления, вытекающие из перепотребления, неудовлетворительного преобразования структуры, и формирование денежных излишков.

Автор особо рассматривает факторы, отражающие инфляционные настроения и показывает, что связанные с ними отрицательные явления в венгерской экономике отсутствуют, наоборот, налицо совершенно противоположные явления. Так, например, в последние годы значительно возросла склонность к сбережениям, преобладающая часть сбережений носит целевой характер и т. д.

В заключение формирование покупательной способности форинта сопоставляется с аналогичными данными по некоторым индустриальным и развивающимся странам и отмечается, что относительная стабильность форинта представляет собой все более усиливающийся процесс и по отношению к валюте многих стран форинт ревальвируется.

Автор заканчивает статью тем, что в сложившемся мирохозяйственном окружении следует отказаться от иллюзии создания и сохранения валюты, не подверженной инфляции. В настоящее время излишне жесткий уровень цен имел бы больше отрицательных, чем положительных эффектов, инфляционные же явления не исчезли бы, а проявлялись бы в видоизмененной форме.

REVIEWS

G. RÉVÉSZ

RESEARCH PROGRAMME FOR THE SCIENTIFIC FOUNDATION OF HUNGARIAN ECONOMIC POLICY

There is a national long-term scientific research plan (LTSRP) effective in Hungary for the period 1971–1985, expressing the demand of society for the concentration and control of scientific research. The tasks of social sciences are naturally included into this plan. Primarily those objectives and viewpoints might be determined by science policy in this discipline which are expected to bear fundamental importance in the given period.

In the Marxist concept of society economic processes are attributed a prominent and basic role within the social processes. In socialist countries planned social control of the economic processes and a deliberate influencing of the economic activity of individuals to conform to the former are coordinated and performed by economic policy. The prime task of economic policy is to guarantee, in the given historical, natural, social and international conditions, the optimum development of the whole economy for society. Accordingly, economic policy cannot fail to observe the socio-economic laws and interrelations which fundamentally determine the possibilities of economic development and the direction of practical action. Perhaps the most important domain of Marxist economic science is to explore these laws and interrelations, to clarify their functional mechanism and how they can be utilized.

Scientific research work on economic policy and its problems are given due space in the LTPSR. Already the version of the national LTPSR adopted in 1972 included the researches summarized under the title "Analysis of the experiences of our economic policy; proposals for its improvement" as a major research program*, and addressed it to the Hungarian Academy of Sciences (HAS).

In the meanwhile the economic situation and, accordingly, the tasks of economic policy have become more complicated and difficult. Today it is an even more emphatic requirement to rely upon the achievements of economic research in shaping the economic policy which, in turn, requires us to further intensify research and to expand the available research capacity. This has manifested itself in the recent admission of the economic

*These researches are carried on in the Institute of Economics, Hung. Acad. Sci. under the guidance of academician István Friss, and the results of the first stage of research were published in a collection of studies. [1]

policy researches into the national LTSRP under the title "Scientific foundation of economic policy" as a research program of national importance.*

The concept and outlines of this research program are surveyed below, using the document called hereafter draft study.**

Scientific approach to economic policy

The domains of economic policy

Economic policy comprises many partial elements and covers almost each area of the economic processes and decisions. At least three domains of the partial elements of economic policy may be distinguished which are closely interrelated and overlapping in practice:

1. Identification of the trends of economic development which match the general line of social advancement, the conditions of a rational adaptation to changes, and of the relevant comprehensive economic development tasks as well as specification of the most important connexions between tasks and means.

2. Determination of the essential functional, as well as sectoral and regional objectives; of the relevant sub-objectives serving realization of the general social objective; and of the means of their implementation.

3. Selection, operation and development of the methods of economic control, planning, economic regulation, the organizational setup of the economy, i.e., of the whole system of economic control and management (of the economic mechanism).

The objectively asserted general economic development trends, the related comprehensive economic development tasks, making up a unified and more or less consistent system, are incarnated in the *economic development strategy*, in the *economic development concept*. The requirement that economic policy ought to enhance the socially optimum development of economy, the prevalence of the global social interest, should be secured first of all exactly by the formulation of an adequate economic development strategy (conception).

The chances and the economic development strategy (conception) that may be chosen are, of course, limited by the given state of the economy, and by the objective laws of economic development. However, the development that might be considered as the best expression of the social interest cannot be derived from the economy itself. Namely, there is not (and due to the nature of the matter there cannot be) any specific exact method for reducing the various needs, efforts and interests to a common denominator and for stating their order scientifically. It is thus a necessity that from the viewpoint of

* The project is managed by a coordinating body, consisting of the representatives of the participating institutes, headed by Rezső Nyers, director of the Institute of Economics, Hung. Acad. Sci.

** The document, discussed on several scientific forums, was compiled by the author of this paper. In his work he used *inter alia* the draft study written by academician István Friss as a contribution to the main research project "Analysis of the experiences of our economic policy; proposals for its improvement", as well as working papers submitted by István Friss, Tibor Erdős, Ottó Gadó, Tamás Morva, Zoltán Román, János Marton, János Kozma, and Tamás Nagy for the purpose of drawing up the draft study.

determining the economic policy concept the leading collective political bodies represent the social interests, define the priorities of needs, desires, etc., by weighing the economic and political considerations and their interactions.

For the determination of the economic development trends to be pursued and of the most important general economic development objectives the following are required:

- to get better acquainted with the objective laws of *economic growth* and to apply these to the given state of our economy,
- to take into account the mobilizable resources of economic growth, including the possibilities for enhancing the individual and collective ambitions and initiatives,
- to determine the conditions of utilizing the available resources, by clearing up and observing the limits of our possibilities,
- to determine the main direction and main proportions of development, as well as the tasks which may be also derived from the existing tension, which are to be put on the agenda from the viewpoint of the general objective of economic growth, namely, the *raising of the standard of living (enriching the way of life)*.

Basing of the strategic decisions of economic policy calls for an analysis of past movements and of the given state of affairs, for an undisguised exposition of problems and an outlining of the possible alternatives together with their inconsistencies and interrelations. This again cannot dispense with scientific research work on the economic (macro-economic) connexions, on the laws of economic growth, on the problems of the development of the socialist way of living, nor with scientifically based planning.

The overall economic development concept is to be made more specific through further economic policy decisions specifying the development objectives and the *related sub-objectives*. This specification is already going on continuously, with the active cooperation of the different functional, sectoral (and regional) economic control agencies and of enterprises, in a way reacting more or less on the economic policy decisions on strategy.

Specification (or concretization) means a choice between quite a number of probable and arising alternatives. In this selection the following are to be weighed, among other things:

- how intensively the different alternatives serve the economic development concept, and what – perhaps inconsistent – side-effects should be reckoned with;
- what are the conditions of implementing the concrete alternative solutions, what are the difficulties, and, reckoning also with the future impacts of the development operations, how will these affect the economic equilibrium or what tensions will they cause (or increase),
- how should the different alternatives be evaluated with respect to their economic effects and the risks involved.

A multitude of aspects must be studied in order to be able to take such a stand regarding these problems which will be reassuring with respect to the prevalence of social interests. Such investigations which are components also of economic planning, while raising several problems of methodology (within that of planning methodology) *to be solved scientifically*, require knowledge and constructive application of highly diversified *multi-disciplinary sectoral development connexions*, of technical features and conditions of the division of labour in the different sectors.

The frameworks and conditions of the activities of productive and servicing units of the economy, the role of economic plans in implementing economic policy, delimitation of economic decisions according to spheres of authority and therein the relations between the enterprises and the controlling bodies and, *via* all these, the prevailing form of enterprise autonomy and interests are shaped and regulated by the *given system of economic control and management* (the economic mechanism).

The system of economic control has to serve the economic development strategy. This point must be highly appreciated in making economic policy decisions about the system of economic control.

However, the system of economic control cannot be tackled simply as a function or derivative of a given conception of economic development. The objective *socialist relations of production* (existing irrespectively of our consciousness and appearing necessarily) must be expressed in the actual system of economic control.

The relevant economic policy decisions are to provide such a form of appearance for the socialist relations of production, to create such a system of economic control, by which the growth of economic efficiency, the proper rate and balanced development of the economy, the satisfaction of people's needs are fostered the best under the given conditions.

Utilization of *informations* flowing among the enterprises and among the sectoral and functional bodies on different levels of economic control, *and of initiatives* is indispensable in drafting the economic development concept and in decisions relating to concrete objectives and sub-objectives, in the whole economic planning work. However, the informations and initiatives, as well as their flow and utilization are determined by the actual organizational forms, by relations of sub- and super-ordination and by interests, i.e. by the drives of the economic organizations, conforming also to the former, which are in part inherited and in part created and developed by the given system of economic control. In this context the economic control system to be operated should

- promote supply of the economic controlling and decision making organizations and bodies with realistic data and with initiatives that rationally reckon with the given possibilities and help the good functioning of the economy,
- in the course of decision preparing and decision making show clearly the emergence of partial interests and thereby, as well as by confronting them, contribute to the recognition of the social interest and to the enforcement of its priority.

Thus, in decision taking on the system of economic control, a wide range of intricately interlocked criteria must be faced. For basing such economic policy decisions the various facets of the functioning of the economy, of the economic processes, the behaviour of the actors of economy are to be *studied empirically, with scientific rigour*, moreover, here belongs the theoretical research oriented towards the general laws of the socialist relations of production.

New conditions and objectives in Hungary

In the coming ten years a substantial change in the *conditions* of economic development will have to be faced by economic policy and the scientific research work intended to support it.

A marked improvement is expected in the level of qualification of labour employed in production: the educational and cultural level of the new generations entering employment is higher than that of the generations already employed. At the same time, the possibility of economic growth based on manpower reserves, on the continuous expansion of employment, has been exhausted for good. Diminishing employment in agriculture is an unavoidable slow process. The necessarily fast development of the non-productive sectors — because of their relative backwardness — forecasts some reduction of the ratio of industrial employment, and even in absolute terms.

The relative backwardness of the productive and non-productive infrastructure, also retarding the development of production, is remarkable chiefly in the capital-intensive fields. The unavoidable developments in these fields raise a greater claim on resources than was the case earlier. This tension (the relative shortage of capital) is growing because investments into energy absorb a considerable part of the funds available for productive investment, furthermore, because demand of agricultural production for investments (capital), is also steadily increasing.

At the attained level of our development it is one of the necessary, objective elements of further development and, at the same time, a potential driving force of growing importance, to escalate and intensify our participation in the *international division of labour*. This tendency comes to expression in the fact that economic growth is taking place in this country along with a rapid increase of import requirements. In this context the shaping of the conditions of our foreign trading relations is worth noting:

- owing to the different commodity patterns of imports and exports because of our natural conditions, the efficiency of foreign trade is sensitively affected by changes in world market prices,

- the increasing lability of the capitalist world market will continue to be a source of many further uncertainties and hazard losses,

- understandably and reasonably, the friendly socialist countries raise ever higher requirements towards the quality of our export items (especially of the manufactured commodities),

- within the CMEA the medium available to us in the first place for expanding the international division of labour, acceleration of economic integration is retarded by a number of factors. Such are for example the relative shortage of capital in all member countries, the shortage of advanced technology, certain parallel features in the industrial structures, the unsatisfactory level of cooperation in planning, as well as the underdevelopment of the market and monetary relations.

As a result of development, a quantitatively more or less adequate satisfaction of demands considered to be primary now (nutrition, clothing, fundamental household appliances, schooling of the new generation, general health services) has been mostly attained. Considering the general development level attained, the aforesaid backwardness of the infrastructure presents itself today as an acute shortage. Moreover, it challenges even those results which have been otherwise established by the growth of production regarding current material consumption of the population (e.g. an overcrowded retail system, underdevelopment of the repair services).

In *living standards* policy a relatively rapid improvement of the quality of material consumption and of infrastructural supply are becoming timely tasks. We have to reckon

with the fact that in the period ahead of us the contradiction between differentiation of incomes from work, necessary for stimulation, and the requirement to reduce social inequalities will present itself together with relatively high real incomes. Finally, it must be also borne in mind that by the end of the period, when a diversified supply of the population will more or less meet the standards of the age, we will encounter a number of novel problems in the development of the socialist way of life.

Under the new conditions certain problems of *regional development* will arise more strikingly than earlier. Such are e.g. the tasks related to the complex coordination of labour supply with natural factors and infrastructural supply, the levelling of regional differences in the population's living circumstances, regional coordination of the educational and employment structures.

Research objectives

Delimitations

Economic science, by its nature, lends direct or indirect help with all its true scientific achievements to shaping a correct economic policy. It is therefore hopelessly impracticable to cover every research activity related to economic policy or to some aspect thereof. This in itself calls for delimitations.

From the point of view of basing the advancement of economic policy scientifically, those research projects deserve preferential treatment which

- are aimed at a specific field of economic policy, or at its elements which are important and are in a determining relationship with other elements, and at important cross-sections of economic policy,

- approach their subject by considering the general interrelations, and process their subject from the aspects of economic development and complex economic policy as a whole,

- tackle the new conditions of Hungarian economic development and the deriving economic policy tasks with the aim of solving the problems.

Such delimitations allow a reasonable concentration of researches and are the condition of efficient coordination.

Directions and objectives of research

In the above context it is reasonable to distinguish seven directions of research within the program. The seven directions and the outlines of the related research projects are the following:

First: Complex analysis of the formulation and implementation of Hungarian economic policy. This research project is intended to provide foundations for the conditions of effective economic policy decision-making and implementation, and of a suitable mechanism. To this end the researches though including some important individual economic policy decisions (classes of decisions) in the scope of the study, are directed towards the whole of economic policy: interpreting the economic policy decisions, their impacts, embedded into the whole of the economy and society, as a part of it, considering their direct and indirect, long and short-term effects alike. Efforts will be made to register and

evaluate the direct and indirect impulses affecting the decision-making process, and the consequences induced by the economic policy decision in the economic and other social processes.

In the course of the research work also delicate matters must be faced. Thus, for example, answer shall be found to the question how the economic policy decisions are enforced, what kind of economic policy is realized in practice, why perhaps repeatedly accentuated resolutions thought to be correct are not implemented, why we are unable to make better use of the advantages afforded to us by our socialist system, why our socio-economic development is not faster and smoother.

The research work shall also study how and how purposefully the economic control institutions operate when stimulating the implementation of a higher decision in the enterprises. The researches also cover the enterprise relations: they attempt to cast light on the operation of the interest relations affecting the enterprises from outside or existing inside it, which influence the enterprises behaviour fundamentally in the preparation and execution of decisions. Through the analysis of the studied priority decisions and economic processes, the research work shall also clear up what happened upon planned, deliberate arrangements by the leading bodies or individuals, according to their decisions, measures or instructions, and what happened spontaneously without having been planned or intended by them.

Second: The rate of economic growth, transformation of the economic structure, with special regard to the industrial pattern and manpower problems.

The starting point is the concept that the objective is not an abstract theoretical analysis of the processes of economic growth, but mainly the study of the practice of Hungarian economic development and the aid given to practice. Theoretical analysis of the important interrelations, international investigations and evaluation of the experiences from the viewpoint of Hungarian development are not excluded: on the contrary, they are implied by such a concept. The fundamental aim of the research work is to answer the following questions: how to guarantee an adequate rate of economic growth in Hungary under conditions which are new in many respects; how to raise the efficiency of the economy; and what role can be played in that by changes in the economic structure and in the labour situation.

The research is aimed at revealing the situation and role of the material factors in economic growth. Therein it shall deal mainly with the raw material and energy supply, the rate of investment, investment efficiency, utilization of fixed assets, utilization of the already adopted technology. It shall examine the interrelations between technological progress, transformation of the economic structure and economic growth. It shall cover the relation between the advance of technological development in depth and width, and the rise in productivity; the conditions of importing and implementing modern technology, the chances for speeding up modernization.

The present and perspective possibilities of manpower policy, the ways of expanding labour resources, the possibilities and conditions of a development policy reducing the labour shortage will be weighed in this research project. The presumable tendency of structural transformation in the demand for labour, assuming a powerful rise in the educational level of the population, the problem of structural correspondence or non-correspondence between the demand for and supply of labour shall be examined.

The differences between economic development oriented towards import substitution and at increasing competitive exports and the probabilities of combining these shall be evaluated from the viewpoint of the correlation between international economic relations and growth, with due attention to the perspectives of developing international cooperation with the advanced capitalist and with the CMEA countries, as well as to the conditions of increasing the flexibility and adaptability of the Hungarian economy.

On these grounds the research project shall attempt to take into account the role of factors which fundamentally determine the rate of economic growth, the bottlenecks coming about, and to demonstrate the domain in which the growth of the economy can be reasonably predicted.

Finally, some socio-political problems of economic growth shall be processed by this research work (such as the ceiling to female employment, the indirect effects of increasing it; the economically and politically justified limits to the differentiation of personal incomes, economic growth and inflation; interrelations between social problems of industrial development and urbanization).

Third: Scientific basing of the standard of living policy (income distribution, consumption, living circumstances, the way of life). This research project is supposed to examine topical problems of the relation between social production and social consumption in the given stage of development from the aspect of the standard of living policy. Its objective is to outline the most important alternatives available to us from the point of view of shaping the development of consumption, bearing in mind also problems related to the reflections in consciousness of changes in the standard of living.

In the course of this research the historical evolution of the structure of the Hungarian preference system and of the pattern of consumption shall be analysed, the modifications in the preference system justified by the process of economic and social development shall be established. Methods shall be explored with whose aid the consumer price proportions and the pattern of consumption might be channelled in a direction desirable from the viewpoint of living circumstances, so as to avert the danger of socio-political tensions.

At the achieved level of economic development bottlenecks are encountered mainly in the infrastructural supply (e.g. housing, health service, retail trade), these require considerable improvement. The problem of reconciling faster infrastructural development with the social and political requirements of increasing the current consumption of the population continuously and palpably is to be covered by the research work belonging to the scope of this project.

In the context of the project the direction (type) and measure of the alterations desirable in the differentiation of personal incomes from work shall be analysed, bearing in mind our interests attached to economic growth and to the improvement of efficiency. It must be considered that at a relatively high level of personal incomes the socialist tendency of levelling personal consumption is arising in a new manner. I.e., the research work belonging to this project is to expose the process how tensions are induced by the tendencies of differentiation of incomes and levelling of consumption as well as the possibilities of reducing or eliminating the tensions, or putting them at the service of social progress.

In the framework of the project those problems of levelling the living conditions of different strata and geographic regions, of the development of the socialist way of living shall be studied which will be encountered — predictably on the soil of a relatively higher level of economic development and social consumption — in the last decade of this century and for which we must get prepared both socially and from the point of view of shaping the economic structure during the forthcoming 15 years.

Fourth: Development of the system of economic control and management (the economic mechanism).

The objective of this research project is mainly to clarify what forms of planning, regulation and organization correspond best to our socio-economic structure and economic development objectives. The posing of the question implies close mutual relationship between this project and the other projects belonging to the scope of the national priority program, chiefly those investigating the contentual objectives.

Economic plans (planning) will be tackled by these researches chiefly as a means of shaping, formulating, and organizing the implementation of economic policy. The functions, contents and connexions of the long and medium-term (5-year) plans are to be clarified accordingly, and the possibilities and conditions of alternatives, i.e., of drafting plan variants, are to be explored for long-term and 5-year planning.

Studies shall be made on the connexions, interactions among national economic, sectoral and regional, as well as enterprise planning and, in this context, on the mechanism and problems of basing the decisions taken at different levels, of exposing and solving conflicts of interests. The possibilities of founding the complex priority development objectives (projects), the measurement and weighing of their secondary economic and socio-political connexions and impacts shall be outlined.

It is one of the central issues of the researches into economic control to explore the interaction between economic policy goals and the system of means, and a better coordination of goals with means. A prominent issue in this field is how to enforce the principle of efficiency in planning and regulation, as well as in the actual economic processes, and what is to be done for more consistent implementation.

The intended and the real role and impact of the normative and individual elements of regulation are to be analysed from the aspects of both the enforcement of central goals and enterprise autonomy. In the course of the work the possibilities of developing the price system, the wage system, the system of making enterprises interested, the system regulating the simple and extended reproduction of fixed assets and that of technological development — and therein of the reallocation of capital — and the control system of the foreign trade processes shall be sketched. The research project shall cover the similar and different features of development in the CMEA countries' systems of economic control and the deriving tasks.

Attached to the aforesaid topics, also the analysis of the organizational structure of economic control belongs to this research project. It shall examine the functions of the sectoral bodies of economic control, the connexions between the ownership functions and sectoral control, the relations between the enterprises and control agencies, as well as the relations between enterprises themselves. The type of the likely rational development of the economic control organization as well as of the enterprise organization of the economy shall be outlined, bearing in mind the prevailing tendencies of socio-economic development.

Fifth: Scientific basing of industrial policy with special regard to the intensive development and organizational pattern of industry.

In the course of this research project the notions, targets and means of industrial policy have to be systematized on a theoretical plane, and methods advanced — including the methods of measuring efficiency as well — by means of which the preparation and evaluation of industrial policy decisions can be carried out. This research shall also clear up the interpretation and requisites of selective industrial development including overall economic considerations, the division of functions among economic planning, central and sectoral control and the enterprise sphere in the shaping and implementation of selective industrial development, and in operating the instruments of execution.

Beside the theoretical and methodological objectives also more concrete studies shall be included in this research project. The possibilities for the realization of certain selected concrete industrial policy objectives, the methods that can be reasonably used in the preparation of industrial policy decisions, in the *ex post* evaluation of their implementation, and in drawing the necessary conclusions by utilizing the body of knowledge of industrial economics and management theory shall be studied with scientific precision. Attempt shall be made at drafting a coherent long-term industrial policy conception (variants of such conception).

The requirements raised against the industrial enterprises by industrial development, and how the enterprises' behaviour can be shaped favourably for rational industrial development shall be examined as well.

Sixth: Scientific basing of agrarian policy with special regard to the industrialization of agriculture.

This research project is expected to reveal the fundamental changes taking place in the qualification and way of life (habits, conceptions) of the manpower employable in agriculture, and those in the technological basis of agricultural production as well as those in the processing and marketing of products. On these grounds it shall outline the development process of the food economy, which also includes agriculture. The main task of the research work is to explore the ways how these changes can be controlled under Hungarian conditions so as to be optimum from the viewpoint of balanced economic growth and the standard of living, bearing in mind the efficiency of the food economy and its importance in domestic supply and in foreign trade relations.

An answer shall be found to the question: in which set of conditions, along what development path it is reasonable to apply, in combination, the traditional and the most advanced methods offered by the scientific-technological revolution, in the production, processing and marketing of foodstuffs. The course of the further industrialization of agriculture as well as the domestic and international — chiefly CMEA — economic and social conditions of the process shall be stated, i.e., exposed in detail. The accompanying modifications in the patterns and ways of farming, concentration and specialization by enterprise or by regions, adequate and rationally applicable solutions to the conditions of horizontal and vertical integration shall be outlined.

It must be reckoned with that the industrialization of agriculture and the development of the food economy will not put an end to small-scale agricultural production. On the contrary, the latter might even grow through the predictable further increase of the small

plots of workers and employees mostly cultivated on week-ends. It would not be correct to equate this small-scale production with the present-day household and auxiliary plots: the prospects of small-scale production and the types of conditions to be provided in order to fit them most rationally into the food economy are to be studied in this context.

Bearing in mind the presumable tendencies of development, the various alternatives of applying the means of economic control in agriculture shall be analysed. The changes likely to take place in ownership relations and interests in agricultural production and in the processing and marketing of products, as well as the possibilities of influencing these and the expedient directions of influence shall be outlined.

Seventh: Economic cooperation and integration of the CMEA countries with special regard to the external economic relations of Hungary.

This research project is hoped to contribute to the scientific basing of the further development of economic policy by analysing the CMEA countries' cooperation, the development of foreign economic relations, as well as the general development requirements of the Hungarian economy valid over a longer period. The research work shall cover the possible tendencies of economic cooperation and therein of the integration processes, in connection with the economic mechanism applied in relations between the CMEA countries and with its presumable changes.

In the context of this research project the economic growth perspectives of the CMEA countries, the tasks deriving therefrom for the different countries, the elements that strengthen the interdependence of the countries in the course of growth as well as those that induce and sustain conflicting interests between these countries must be reckoned with. Concrete analysis shall be made of the probable areas where specialization and cooperation in production may be developed, of the economic ways of satisfying the Hungarian raw materials needs from CMEA countries, and of the resulting unavoidable constraints of the Hungarian economy.

The studies shall reveal the experience so far obtained concerning the advancement of the international economic mechanism of CMEA cooperation and integration, and the possible alternatives of further development. In this framework the development possibilities of cooperation in planning, of the CMEA's international price system, of the monetary and financial systems of cooperation and integration, etc, shall be dealt with in a longer perspective.

From Hungary's point of view the place and chances of developing the CMEA integration shall be evaluated with respect to the present and future order of world economy, and the development perspectives and further improvement of the relations between the CMEA member countries and the developing countries, between the CMEA member countries and the advanced capitalist countries, and between the CMEA and the EEC shall be studied.

On this basis the advantageous alternatives of our fitting into the CMEA economic integration shall be outlined.

Reference

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BOOK REVIEWS

PALÁNKAI, T.: *A nyugat-európai integráció* (West European integration) Budapest, 1976. Közgazdasági és Jogi Könyvkiadó. 268 p.

The paper divided into five chapters concentrates on the transformations the West European integration went through during the past ten years and especially in the first half of the 70's, on the direction and rate of its further development and, last but not least, on its inconsistencies. The author connects his analysis of the daily economic policy routine with an explanation, and occasionally with a thorough critique, of certain essential elements of integration theory.

The author sets out from realities stating that in the first part of the 70's the West European integration went on developing in several fields, yet at the same time there emerged unforeseen obstacles such as the fundamental changes in the world economic environment, a more pronounced manifestation of the specific interests of member states, and also special inconsistencies deriving from the integration process itself. From among the inconsistencies of various origin the EEC seems to have dealt the most in recent years with the "challenges" coming from the world economic environment. In part, these problems have in fact come into the foreground in the economic policy routine everywhere, in part, their solution – their partial and provisional relieving – seemed to be more palpable and easy than to remedy the controversies emerging in the whole system of integration. This explains the strengthening of the strive after independence of the West European integration by the early-70's, and the parallel repression of direct US influence. (The American economic policy pursued since 1971 as well as US foreign policy intended, not incidentally and not always in vain, to check the apparently too vigorous "world power" ideas of the West European integration.) The increasing role is expressed in the association agreements

concluded with a considerable number of developing countries, and also in the EEC's "Mediterranean policy". At the same time it should be noted that collectivity did not strengthen along with the strengthening of the world economic role of the integration; beyond the apparent (or not even apparent) unity emergence of national economic and political interests may be observed.

The diverging forces are looming not only behind the seemingly uniform picture, but are also characteristic of one of the most decisive elements of advancing the integration, of the differentiating process detectable in the member states' economic structures. Of course the surface shows strong assimilation: the macro-economic structures of member states approached to one another, the competitive character of industries further increased due to integration, yet a study of the microstructure (product pattern) allowing finer distinctions shows remarkable differences, and hints at marked complementarity and intensification of direct relations in production. The author is right in noticing that in the West European integration "the structures have dynamically interlocked, since they are kept in a state of permanent transformation by technological development and by the incessant appearance of new products... The mechanisms implanting competition are essential because in a cooperation aimed at physical complementarity there is increased risk of structural stiffening. In such a system adequate urges for the continuous modernization of production and for introducing new products at a proper rate are missing." However, the author warns that government intervention, a special feature of state monopoly capitalism, is enforced in a considerable part of the West European market directly and in some of its parts indirectly, in an attempt to prolong the opportunities of development within the international integration. This might produce important modifications in structures of the economies by the

1980's, and might fundamentally affect the power relations of the integration. In this connection the author notes that the process of internationalization assumes not only the internationalization of capital but also that of the progressive forces and of class struggle, and in the future it might bring forth the alternative of a united leftist action against the multinational corporations.

As there is a "democratic alternative" to the development of integration, a more advantageous process in the EEC's international economic cooperation is also conceivable which could be set against the likelihood of a protectionist development of integration. The creation of direct relations between the EEC and the CMEA as two European integrations, the disclosing of reserves of all-European economic cooperation, etc. would lead towards this end.

Palánkai gives a detailed analysis of the most important fields of the economic integration policy of the EEC. He establishes with thorough analysis that though there are many factors explaining the faster than average expansion of trade between the member states and the consequent increase in the weight of intraregional turnover, yet the market creating character of the integration (lifting customs) must have had a decisive role. It cannot be incidental that after the commercial impulses with a soundly good influence on economic growth had lost vigour by the end of the 1960's, the moderation of the growth rate of the area took place in the accomplished customs union.

In his survey of the agricultural policy the author emphasizes that in this field integration transcended the customs union and proceeded towards state monopolistic regulation. This again produced a wrong structure characterized by overproduction crises, a swelling of the agrarian budget, increasing national discords, as well as a slackening of the process of structural transformation in agriculture and by fundamentally political (electional) considerations superseding economic necessities. Though this state of affairs was provisionally and superficially improved by the change in the world market prices of agricultural products resulting in the EEC's agricultural prices occasional dropping below the world market level, yet the basic problems were not eliminated, they only appear from other aspects and in different form.

The need for both agricultural regulation and further progress suggested the plan of creating a

monetary union. The book illustrates convincingly that the completion of monetary integration, which may be incarnated in the creation of a common currency, and total international state monopolistic integration, mutually assume each other's existence. This dialectic process asserting itself through much contradiction was complicated by unpredictable elements in the 70's. The frequent modifications of exchange rates, then their floating have turned the plan of economic and monetary union based originally on fixed exchange rates of currencies into an illusion for good. Several, so far fruitless attempts were made to work out the adequate instruments, though the member states have undoubtedly reached quite good understanding concerning the necessity of monetary and economic union, as well as concerning the necessity of a regional fund which – for the time being with a relatively modest budget – has already begun its activities.

Partly because in the past years it was not in the foreground and partly because there was no possibility of common versions of solutions, little has been done for coordinating industrial and energy policies. In the first one intertwining and cooperation in production, finances and technology developed chiefly between American and West European firms, while in the latter case the domination of the USA – also bearing in mind the role of shock effects – did not allow to define the Community's special ways (most probably an energy policy excluding the USA could have not been implemented in practice regarding oil producers even if all EEC member states had agreed).

As regards foreign economic relations the book deals with the agreements concluded with the "residual EFTA" with the character of relations established with Mediterranean countries, and with the Lomé Convention. It states that in the framework of the latter the developing countries concerned are given better opportunities but the world economic position and the long-term development possibilities of the developing countries are not altered substantially even by the division of labour promised in the Convention.

Along with the parallel discussion of actualities and the theoretical approach, the attempt to formulate a personal opinion about the acutest development problems of West European integration in its critical stage adds to the merits of the book. The statements and hypothetical formulations on the one hand call attention to the latest development tendencies of the EEC integration

and encourage their continued study, and on the other hand expose the problems of the theory of international integration which are far from being clarified. The further development of West European integration in the coming years will presumably help answering questions such as the optimum ratio of intraregional trade with a view to efficiency criteria, the feasibility of introducing dynamizing integration processes in the period after "having consumed" the dynamic impetuses of the accomplished customs union, the ways in which the EEC, built on a durably quiet world economic environment, can survive in new and briskly changing foreign economic conditions, the likelihood of harmonizing on Community the national interests crossing each other, and of compromising solutions.

A. INOTAI

SZENTES, T.: *Az elmaradottság és fejlettség dialektikája a tőkés világ gazdaságban* (Dialectics of backwardness and advanced state in capitalist world economy), Budapest, 1976. Kossuth Könyvkiadó. 496 p.

After dealing in several works of his with problems of developing countries Tamás Szentes undertook in his latest book a complex analysis of the interrelations between and interactions of an advanced state and backwardness of the economy.

In the first part of the book the author analyses bourgeois theories dealing with economic backwardness, ... which are "unacceptable for general explanations of backwardness —, ... while they serve well the understanding of certain partial phenomena". (p.17) It is from this aspect, through a critical analysis of political and economic indicators that he explains interrelations between economic backwardness, characteristic of developing countries, and an advanced state of the economy.

The analysis of the role of natural, geographic and demographic endowments in economic development is remarkable. The author points out on the one hand the high importance of these factors, and on the other hand the fact that the characteristics of socio-economic development cannot be explained by causes outside society, i.e., by natural, climatic and other causes, but solely by social factors. It is not the natural endowments that determine social development

but on the contrary: it depends on the attained level of socio-economic relations to what extent man is able to put natural and geographical endowments at the service of a further development of his own society, i.e. to use them for his own purpose. Later, of course, these endowments react on the social situation: they may hinder or promote social progress.

In the second part of the book the author examines the dialectics of backwardness and advanced state through a historical approach, within the actual capitalistic world economic system. This part extends over two-thirds of the whole book: its ten chapters doubtlessly analyse the most important interrelations, arguing with and criticizing not only bourgeois positions, but exposing also the views of Marxist authors — among them contemporary Hungarians — and polemizing with them, too. In the second part I hold for particularly remarkable Chapter 3 entitled "Background of today's crisis phenomena of the capitalist world economy". The author refers in it to interrelations between the so-called traditional forms of the international division of labour (exchange of raw materials and agricultural products for manufactured goods, i.e. complementary exchange between economies, based on natural differences; division of labour between advanced industrial countries and backward colonies) and its new character. The basis of this new division of labour is no longer determined by the different production structure of the participating countries, but exactly by their being identical: the largest manufacturers and exporters of the most dynamically developing articles requiring the most advanced technology will be also the largest buyers, i.e. importers of the same articles.

It is also a very important statement of the author that the division of labour developing on the basis of the scientific-technological revolution does not mean that the importance of raw materials produced and supplied by backward countries has ceased or even diminished for the advanced countries: it is only the share of these products in world trade that has shrunk, since natural conditions put a limit on the increase of their production, while the series in which finished goods of the most dynamic industrial branches are turned out is dependent on scientific development hardly knowing any limit. Parallel with all this the author also proves that there is no question of advanced industrial countries being dependent again and increasingly on the raw materials and energy from developing countries. He

makes the statement: "both conclusions are partially true; a 180-degree turn of judgement within a decade is at least an exaggeration and warns us against the danger of a one-sided view". (p. 227)

The book treats in detail the main features of the so-called "centre-periphery" relationship and the disadvantages resulting from it for countries of the third world. Relying on analyses of Soviet economists, as well as on statistical data of the OECD and the UNCTAD the author proves that developing countries are still exploited: their economy depends one-sidedly on advanced countries. Because of their dependent state in trade and their disproportionate participation in the international division of labour they are easily vulnerable, and, because of their distorted, one-sided production structure they have to suffer constant losses in their world economic relations on account of deteriorating terms of trade, the colonial as well as the neo-colonial division of labour and because of financial and foreign exchange relations.

The author shows that differentiation among developing countries is accelerating. He reviews and simultaneously sharply criticizes the static categories of countries of the third world elaborated by the UNCTAD and almost fully accepted in Western literature, and outlines such new categories of differentiation which "are expressive of the structure corresponding to the inherited colonial international division of labour, as well as of their deviating development within the reorganization process of world economy". (p. 443) Upon this basis he divides the developing countries into six groups as follows: mineral oil exporters; exporters of other mineral raw materials; countries specialized in agricultural exports (industrial raw materials of agrarian origin, staple foodstuffs, and so-called colonial goods); countries with an industry of considerable importance and exporting industrial finished goods; countries with the least developed export enclaves; and finally, the populous countries struggling with mass famine, unemployment, and chronic indebtedness.

With this categorization as well as through a comparative analysis of backwardness and advanced state the author throws light on the way the developing world has covered in the fight against colonization. At the same time his analysis renders it evident that an anti-imperialist revolution of developing countries cannot be expected from a general and joint uprising of the countries of the third world. It is only the

strengthening class struggle in each country and its uniting with the anti-imperialist struggle of the international workers' movement that can lead to the final liberation of the tens and hundreds of millions living in the developing countries, to the total elimination of their exploitation and to the foundation of their socialist development. In this fight the socialist countries are natural allies of the developing world.

The last chapter of the book summarizes the role of socialist countries in aiding the developing countries. The author points out that the mere existence of the socialist world economy presented an invaluable help in the elimination of the colonial system of imperialism and it still presents these days in consolidating the independence of the liberated countries and in creating their independent national economies. Besides, the unselfish aid of socialist countries does not only serve as an example but also forces the advanced capitalist countries to facilitate progress in countries of the third world by preferences and other advantages. Finally, the author points out that the intensifying friendly relations of socialist countries with developing countries are motivated by both political interests and economic rationality, and that the extension and deepening of these relations are in the interest of both groups of countries.

In the final account, Tamás Szentes's new book provides a complex analysis — based on novel theoretical considerations — of the interactions between advanced state and backwardness.

L. RADÓ

HARRISON, R.: *Workers' participation in Western Europe 1976*. London, 1976. Institute of Personal Management. 89 p.

The present volume is already the second information report on workers' participation, published by the IPM.* The term "information report" used by the author himself describes quite exactly the character and contents of the text. Rather compact in size — some 90 pages in all — it gives an outline of actual developments in that segment of the social-economic system which is

*The first one, written by J. R. Appleyard, was published in 1971, under the same title.

usually covered by the term participation. The report uses the term participation in a broad and general sense, applying to the description of the situation in all developed Western European countries (Austria, Belgium, Denmark, Finland, France, FRG, Ireland, Italy, Luxembourg, Netherlands, Norway, Sweden, Switzerland, United Kingdom, including Spain too), even in those ones where no comprehensive and/or really working institutions and participation procedures exist. The author regards and uses the concept of participation as a substitute for industrial democracy in its broadest sense, defined by him "as a general term implying the right of employees to be informed about and to influence decisions which affect their working environment".

The ways and means of achieving these rights can be divided, in the author's opinion in four categories:

- *consultation*, defined as involvement in discussions leading to decisions by management,
- *communication*, defined as a two-way flow of information.
- *collective bargaining* in its almost traditional sense,
- *co-determination*, defined as a statutory requirement for employees' *agreement* to certain decisions.

Regarding these definitions as guidelines in an essentially descriptive country-by-country material of official measures and different propositions, one cannot deny the usefulness of such an approach what is proven by the report itself. One can compromise also with the proposition of the author, that only "institutionalized participation" is to be reviewed: participative agreements laid down by law or national level collective agreements. A good point too, that a general view of the wider industrial relations context is included in the individual countries' sections.

On the other hand, the report does not broaden the concept of participation in another sense. Writing only about the workers' rights of consultation with management, agreement to management decisions, etc. the report is limiting itself to its practical aims and to actual developments, but in the meantime to restricted aspects in the context of participation. The problem of workers' decision power, the possible ways to taken an active part in *making* decisions, their role in the regulation and control of production and of working environment are mentioned but in a few cases. The concept of participation is not confronted with other concepts, related also to in-

dustrial democracy, such as workers control, self-management.

After a brief enumeration of the important participation agreements in recent years and distinction of participation levels the report concentrates on participation in companies from shop-floor to board (management and supervisory board) level, including a review of special provisions in the public sector.

The country-by-country sections are structured in a way to give the reader a good possibility of comparison. But the warning of the author is to be observed: comparisons even of similar institutions in different countries may well be misleading! The East European observer is also advised to get rid of the misconception, widespread in the United Kingdom, that some sort of uniform system of participation exist, at least throughout the Western part of the continent.

Each country section starts with a brief summary of the general framework of participation, followed by an elaborate description of works council structures and roles, trade union representation, board level participation. The closing part, entitled by the author: future trends in participation, is a sort of short analysis of the propositions and often conflicting views of government, employers' and employees' organizations.

It is mainly this latter part which provides a basis for further reflexions about the nature and inherent contradictions of participation structures already introduced and to be developed in the future. Without going into details of individual countries, let us mention only a few crucial problems.

The facts and opinions described in the report seem to give more importance to participation at board level in contrast to the shopfloor level. The differences in the field of employee participation in supervisory boards are more striking than the differences in the structure of less indirect forms of participation. The greater importance given to participation at board level can be positive if it means some kind of employee decision-making power, or at least a possibility to have a say in most important company matters. But it raises a lot of questions: what could be the real powers of such a *mixed* or parity board or, going further, what are the real powers of existing supervisory board structures, etc.

Another important issue is the setup of participation structures too remote from the ordinary worker. This problem is stressed by the author

too, but only in relation to the possible increase of trade union power instead of industrial democracy. In reality it is a more general problem: in the case of all indirect forms of participation, whether a possibility they are trade-union-based, influenced by/or independent from trade union structures.

All along the presentation of trade union views on and approaches to participation concepts and propositions two different behaviours of the agents can be perceived: the difference between the readiness to accept cooperation with management in all problems of the working environment and the opposition to cooperation with management. This could be decisive for the future formation of participation. In the case of the Netherlands and Belgium, for example, the author is quite explicit in pointing out the rejection of any involvement in managerial responsibility when writing about the behaviour of some socialist oriented trade unions. Behind these differences there are, of course, two different models – one based on cooperation, the other on conflict – of the whole system of industrial relations.

At the end of the report, instead of a summary, the reader can find recent developments in participation at the European Economic Community level. The presentation of the EEC's Fifth Directive and of the Green Paper on participation reveals that harmonization of the existing more or less divergent participation structures will not be easy at all and there is but a pale hope of "short-term standardization".

The proposal for the European Company Statute includes complex, but partly facultative provisions on participation in supervisory boards, formation of European works councils. One can agree with the author: the main problem of the creation of a new legal entity which would exist side by side with companies under national law is, that no one will choose to adopt the status of a *Societas Europea*.

There is a short list of recommended further reading attached to the text. This is far from being as comprehensive as the bibliography of the previous report, but it is suitable for further investigations, since it refers to extensive bibliographical publications too.

The report concentrates on formal provisions: institutionalized forms and administrative frameworks of workers' participation. This may be a reason why it is a little difficult to understand what the real differences in the role and function-

ing of apparently similar institutions are. Without the claim to being an exhaustive analysis of all facts and findings in this field, the report is a good source of information for all who are interested in the problems of participation both on employers' and employees' side and a good compass for those who are attempting to gather all the developments in participation in order to confront them with economic and social reality.

J. KOLTAY

ЭННУСТЕ, У. А.: *Принципы декомпозиционного анализа оптимального планирования* (Analysis of decomposition principles for optimum planning.) Таллин, 1976. Изд. Валгус. 174 p.

After the release of the known article by *Dantzig* and *Wolfe*, research into decomposition methods had been in the focus of attention for a long time. This particular attention was shown by the numerous publications at the end of the 60's.

The decomposition algorithms can be evaluated from two aspects. One of the aspects may be named computational, or algorithmic aspect. Another reason why the decomposition algorithms have become interesting is that most of them can be given precise economic interpretation. It has been noticeable in recent years that few new algorithms have been devised, attention has shifted rather towards the economic interpretation of modelling.

Mathematical-economic models play an important role in the process of perfecting the planning of socialist economy. The book by *Ennuste* deserves special attention from this point of view.

In the preamble of the book two goals are set by the author: in part he attempts to provide orientation among the numerous algorithms according to definite principles of standardization. He considers his second task to discuss several new problems arising from planning and economic problems, and to show the presumable development trends of the subject. The decomposition methods are discussed in subordination to the two goals in a clear-cut style, through formalized exposition wherever possible, and verbally otherwise.

The book consists of 6 chapters. The *introduction* deals with fitting the rich literature on decomposition algorithms into mathematical economics, with the roots of the subjects, in the history of theory, as well as with the contempo-

rary ways of possible applications. The complex task of optimum planning can be described with an interrelated system of partial tasks. The decomposition principle is the term for such an approach to the planning task where the solution of the complex system is attained *via* the solution of the subsystems.

Chapter 2 deals minutely and in a formalized manner with the questions of coordination principles between subsystems. Two fundamental forms of coordination are used with decomposition algorithms: the first is related to the objective function of the problem, the second one to its constraints. The author calls the first case stimulation through shadow prices, and the second case the method of constraint distribution. In the first case, beside stimulation through the shadow price of activities, also the application of penalty functions is presented. The relation of the iterative process with the *Lange-Arrow-Hurwicz* procedure and the strict convexity assumptions used are discussed in detail. As the combination of the different principles of coordination is also feasible, it is possible to formulate a coordination method best suited to the structure of the problem.

Chapter 3 deals with the decomposition principles and methods of deterministic problems. The author distinguishes five decomposition principles: decomposition by time, by types of activity, by objectives, by solutions or constraints, and the problem-oriented decomposition. In fact, the rich literature on the decomposition methods is an expression of the fact that the above five decomposition principles may be combined with several forms of coordination that always results in a decomposition algorithm. The author gives detailed analysis of the characteristics of the decomposition principles, and describes the application of the possibilities in a colourful manner. In case of decomposition by time the partial tasks to be coordinated refer to a given interval of the plan period covered by the original plan. In case of decomposition by activities the original problem is divided into sub-problems according to activities or activity groups. The third principle of decomposition is essentially the following: the optimum criterion of economic planning includes a few indicators which may be denoted as "objective" indicators. The original problem may be divided into sub-problems in a way that precisely these indicators should figure among the arguments of the sub-problems objective functions. The division of the original problem into sub-

problems plays a role also in case of decomposition by constraints as well as with the decomposition principle adjusted to the special features of the problem.

The five decomposition principles can be applied in two ways. Accordingly, the author distinguishes two types: conjunctive and disjunctive decomposition. In the disjunctive case the indicators figuring in the sub-problems may occur always only in the same sub-problem, while in the other case overlapping is permissible. This distinction is a new approach and warns that so far little attention has been paid to the handling of conjunctive cases though they are very interesting both from theoretical and practical points of view. Both types of the decomposition principles may occur with the decomposition principles by time, by objectives and with the problem-oriented one. Decomposition by activities may be considered in principle as disjunctive (e.g. the Dantzig-Wolfe process).

Chapter 4 dealing with a class of stochastic problems, is a novelty and very interesting. It is known how important it is, in certain cases, to treat the economic indicators and parameters as random variables. In this field only the first steps have been made as yet, and mostly approximation methods are applied. In the known stochastic programming problems the variables considered to be random are characterized by their expected value and distribution, and this is how the results are obtained. On this basis an interval can be given for the values of the variables. One of the most severe difficulties with such problems is that the size of the problem grows remarkably in comparison with the deterministic problem. In such cases the application of some decomposition processes is advisable. The author shows the possibility of that, exposing at the same time also the unsolved problems.

Chapter 5 describes the most essential elements of the planning system in terms of systems theory. The study is interesting also because the character of the planning tasks, the sub-systems of planning, and thereby the interpretation of the decomposition methods from the viewpoint of economic planning become easier to understand.

Chapter 6 contains summarizing ideas about the changes of improving the decomposition methods. It was noted that so far mainly the algorithmic research has developed markedly. According to the author the possibilities of economic interpretation have not been utilized sufficiently. He demonstrates with several examples

the relations with economic systems theory. He attributes great importance to the research into the principles of coordination and to the study of stochastic problems. He is of the opinion that decomposition by targets will play an increasing role in the future. The prime economic objective is composed, namely, of the sub-system of targets. These targets can be arranged according to a hierarchy. It would be important to utilize the

principles and methods of decomposition in this field. A further interesting problem is a more organic connection between multi-objective optimization and the decomposition methods.

Summing up, the book by Ennuste is a very good summary of a rich field of research, and an instructive foreword to further research into the systems approach to planning.

J. SIVÁK

BOOKS RECEIVED*

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**To be reviewed in Acta Oeconomica.

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Jean GARNIER: — Développement et satisfaction.

Paul BOURRIERES: — Transports, communications, travaux publics et développement.

Pierre GARRIGUES: — La dimension écologique du développement.

Jean BOUSCARLE: — Formation et perfectionnement des cadres du Tiers-Monde en matière de gestion et d'organisation des entreprises.

Jean WERQUIN: — La recherche appliquée française en agronomie tropicale, et son apport au développement du Tiers-Monde.

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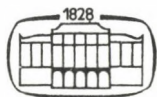
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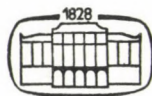
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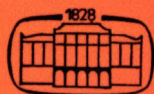
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I. T. BEREND

CURRENT HUNGARIAN ECONOMIC POLICY IN HISTORICAL PERSPECTIVE*

The paper evaluates the present energy crisis and the dramatic shift in the international terms of trade as concomitants of the new era of world economy. The author emphasizes the importance of correctly interpreting the nature of changes and of adjusting to them in time and in a flexible manner. He illustrates in historical examples that countries capable of flexible adjustment may turn even originally detrimental changes to their advantage, while countries that cannot move from their static, rigid state are not guarded from decline even by favourable changes in the world economy.

Under the current five year plan, i.e. between 1976–1980, investments are to increase by an overall 26 per cent, by 28 per cent in industry and by 3 per cent in agriculture. Forty per cent of industrial investments are concentrated on mining, metallurgy and electric energy. In connection with these facts let me put the question that quite a few would ask, and which is closely related to the traditions of social sciences: *Is it a task of economic history* to draw such or similar facts characterizing the economic policy of the present or near future into the scope of its own discipline? Or should it leave this task to the economics of the present or to the economic historians of the future? Many economic historians would be inclined to answer this latter question in the affirmative – those who do not regard the present as history, and many economists, too, those, who do not want to deal with the “dead past”. (As against this, the practice of Hungarian economic policy has tended for about a decade, to exploit the lessons of economic history analysis in the formulation of economic strategy, and in long and medium-term planning. Specific requests made for practical purposes have given so far more stimulation and inspiration to research than the latter has been able to return.)

Indeed, an economic analysis of the present cannot dispense with the historical approach – the separation of current events from past processes would be entirely mistaken.**

It is often heard that “the period after World War II”, or “the sixties and the seventies”, or “the current five-year plan” “is not yet history”. However, this prejudice is older than we would think. It was more than thirty years ago that the famous French historian, M. Bloch challenged this view. “Many people are inclined to voice that the

*The study is based upon a lecture held at the 1977 General Meeting of the Hungarian Academy of Sciences on May 4th. The basic sources of the study are Hungarian as well as international statistics and documents concerning the fourth (1971–1975) and the fifth (1976–1980) five year plans. The references made in the text contain partly source information, partly further literature.

**According to certain opinions, there is such division of labour between economics and economic history that the latter is “the economics of past systems and forms.” Of this is said in [1] that “This is true but not wholly, as economic historians tend to deal increasingly with periods close to the present.”

period after 1914 or 1940 is not yet history, without clarifying the reasons for this refusal. Some, thinking that facts near to us cannot be the objects of any kind of really unbiased survey, precisely on this account, simply try to save the virgin Clio from a too hot embrace." [2] The misunderstanding of the connection between past and present in Hungarian social sciences, their separation as exclusive concepts is perhaps strengthened by the fact that in the Hungarian language there is no connection between past and present. A statement in Hungarian is either in the Past or Present Tense; the Hungarian language does not know of tenses indicating actions having taken place in the past and affecting present occurrences by their results. It seems that the fight for the truth of the indivisibility of past and present must be fought again and again, though it was revealed long ago. It was put concisely by *Goethe* as "*Gestaltungslehre ist Verwandlungslehre*", i.e. a state can only be understood from the process of change. But perhaps it was *Thomas Mann* who spoke most beautifully about the historical time, the overlapping of the dimensions of past and present, with a magic-playful reasoning in his *Joseph-trilogy*: against the traditional view of the past, that of 'once upon a time', he set the exclamation worthy to become the motto of all historical works: "the past is present, it is always present".

The disciplines of social science tend to divide the undivisibly integrated development process of human society into a growing number of fields; the walls between these dominions have not been sufficiently demolished as yet. Albeit a separate analysis of the economic and social, psychological and artistic, present and past processes of the development of society helps to gain a deeper insight, it nevertheless hinders the understanding of the totality of the process, of the whole if we fail to link up the economic with the social, the present with the past.

World economy and national economy

To begin with, *two* historical factors must be mentioned from the aspect of current Hungarian economic policy, namely, the historical interrelations between the *world economy and the national economy*, influencing the present.

While working for the achievement of unchanged goals, the present economic policy is seeking an answer to the challenges of the energy crisis, having exploded since the turn of 1973-74, and of the world economic transformations unfolding as a consequence. However, the answer of economic policy to the external effects could only be formulated within the framework established by the development path and the economic policy antecedents of the preceding decades. The present Hungarian economic policy is, thus, part of historical processes moulded by the immanent requirements of Hungarian economic development and by the consequences of changes in the world economy.

The changes in the world economy, emerging from the autumn of 1973 and the beginning of 1974 seemed first to be incidental, temporary derangements for political reasons, later they seemed to be the symptoms of another usual crisis. Many regard them as such even now, treating the different crisis phenomena of the world economy as the economic troubles of the capitalist world, meditating whether they are favourable or disadvantageous for the socialist economies.

The analyses penetrating below the surface, however, did not stop at the all too characteristic phenomena of the completely upset price relations, the uncontrollable inflation, the diminishing rates of growth. In the analysis of József Bognár [3] the six fundamental world economic problems he treats become a unit, although they affect partly the most developed, partly the most backward countries, regions, and their affect is sometimes advantageous, sometimes disadvantageous. All the six problems are viewed and treated in a single framework, and the conclusion is drawn that we witness the beginning of a new era in the history of the world economy.

This seems to be supported by economic history research, according to which there were two great world economic eras since the birth of the modern world economy in the 16th century. Of course, the space of this paper would be hardly enough for the treatment of these eras, lasting from the 16th to the 18th, and from the early 19th century to the middle or last quarter of the 20th century, respectively.*

However, I would like to point at two characteristic features. The first one refers to the shocks of the transition. The emergence of the world economy proper from the 16th century onwards broke up the framework of earlier economic units, based upon self-sufficiency, did away with the old type of commercial relations. The vast new circulation of commodities and precious metals involved a complete restructuring of the former European 'world' economy, and, within this, rendered the 16th century a period of a peculiar price revolution.** In the wake of this restructuring the price and exchange relations basically valid throughout the whole of the era were formed, reflecting the dominant position of the developed West-European countries, the centres of the world economy.

Similar symptoms characterized the world economic transformation in the 19th century, following the industrial revolution. The most spectacular indicator of the disturbances of the changes, of the transformation was again the 'price-revolution'.

The price level dramatically fell, i.e., the price level on the world market came to be determined by the price level of countries having achieved the most advanced mass production — this was greatly complemented by the fall of the costs of mass transportation.*** As a consequence, price and sales crises of various products followed in the more backward countries producing at the former high (or nearly as high) production costs.****

*From the literature on this subject, and within it, on the domestic research on the development of the world economy in the 16th century, let me underline the work of Pál Zsigmond Pach, which was a pioneering one even on an international scale. [4, 5, 6]

**On the 16th century price revolution see [9, 10, 11, 12]

***A great opportunity for this was provided by the extension of the modern world transport system in the 19th century. The rapidly spreading steamships provided faster, closer transport connections between continents, the routes were cut short by internationally important canals (the Suez canal was completed in 1869, the Panama canal in 1915). Between 1873 and 1898 only, the quantity of goods transported aboard steamships more than doubled. In connection with all these, the costs of shipping were reduced considerably in two phases, first between 1815 and 1850, then between 1870–1910. As a result of railway construction started at the beginning of this century, the railway network increased from 9,1 thousand kilometres in 1840 to 1063.1 thousand by 1910, thus making possible the huge boom of inland mass-transportation.

****For instance, the coal transported from England became cheaper on the Spanish coast than that produced 50–100 kilometres away in the heart of the country; European corn lost the competition with the American corn flooding Europe etc.

The price crisis thus became a crisis of the production structure. The other phenomenon refers to the identical content of the two eras: in the 16–18th centuries the world economy was formed through the rapid capitalist transformation and economic progress of the West-European centre, through the establishment of its colonial system and through the foundation of its role in the world trade. This was the nucleus around which, and in connection with, the world economy developed as a united system. A peculiar order of international division of labour was established in which peripheral countries were destined to provide the agricultural products and raw materials.

In the new stage of the development of world economy, following the industrial revolution, the core-periphery type of relationship founded in the earlier centuries became intensified, and extended both in a regional and in an economic sense.*

This set of world economic conditions underwent a slow but radical transformation from the middle of our century on, in the post-World War II period. The emergence and economic strengthening of the socialist community, disintegration of the colonial system, establishment of the world political and military power balance (which created a new situation and new opportunities for the countries of the former periphery) destroyed century-old structures. These changes not only questioned the given state of the division of labour between raw material producers and the producers of industrial finished goods, but also rendered unbearable the 'natural' mass poverty and death from starvation to which people had been earlier accustomed. At the same time, the exceptionally fast development more and more accelerated the demand for energy and raw materials. During the decades after World War II, the quantity of goods and services provided for mankind doubled in every 10–15 years. On the one hand, this exacerbated the problems deriving from the scarcity of food and raw material resources, and, on the other, aggravated the effects of environmental destruction to an extent causing already grave concern.

The changed international situation saw great changes in the political, social and partly in the military position of formerly peripheral countries, a whole group of socialist countries broke out of the backwardness and achieved a successful industrialization. At the same time the European periphery in the classical sense, together with a group of formerly backward countries outside Europe are catching up generally. The structure and price proportions of the world market that had been established in the 19th and 20th centuries became chaotic and lost their stability. The international financial system collapsed. The incredible fluctuations of prices led to general, large-scale price increase, at the same time, the terms of trade of raw materials and foodstuffs on the one hand and of finished manufactured goods on the other, characteristic of earlier periods (i.e. several

*It underlines the consolidation of the former type of international division of labour that before the first World War, nearly three quarters of all raw products sold in world trade were purchased by England, some developed North-European capitalist countries, and by the United States and Canada; in the same period, about two thirds of industrial finished products were purchased by the other countries of the world, i.e. the peripheral countries of Europe and other continents. From another aspect: the peripheral countries were raw material producers even at the beginning of the 20th century: three quarters of the exports of the peripheral countries of Europe, and 90 per cent of those of other backward countries consisted of raw products. As against this, 50–70 per cent of the exports of a few European countries in a central position consisted of industrial products.

hundred years) of the history of world economy showed new tendencies of change, involving that the former group of products became more expensive.

A complex approach to historical processes allows to draw the conclusion that, in spite of the different disturbances, we have to do now not simply with a crisis but with a transition to a new era accompanied by crisis phenomena. (Great transitions have always been accompanied by crisis phenomena, serious disturbances and price revolutions.) If this is so, the shocks of the transition can by no means be taken merely for economic disturbances of the capitalist world, as the beginning of a new era of the world economy naturally creates new conditions for the economy of every country. Fitting into such a new framework, the accommodation to the new conditions may involve serious difficulties for certain countries, maybe lesser ones for others, and can even provide better opportunities to certain countries than they had earlier.

The beginning of a new era of the world economy is a factor significantly determining the present and the future of Hungarian economy. Within this context, in spite of their disturbing circumstances the nuisances due to the instability on the world market are far from being the most important, as they are but temporary phenomena. This is so even when we regard the period of instability itself as a longer historical period of transition.*

Still, the *lasting* tendencies unfolding from the often chaotic imbroglio of the transformation are much more important for the contemporary Hungarian economic policy, tendencies to which one must adapt and which will be yardsticks for achievements in the further progress of the economy.

The consequences for economic policy of the beginning of a new era in world economy cannot be assessed by themselves, without considering that these changes historically coincide with the beginning of a new era in the internal development of Hungarian economy as well.

The Hungarian economy started on the road designated by the industrial revolution more than a century ago, but has reached the emergence of the industrial character of the national economy only in the present, in the last third of this century, when the preponderance of industry is based upon a certain development of the whole of the economy, of course, according to the requirements of the age. Hungary has been passing the historical line between the low and high grade of development in the last ten years leading up to our time. This conclusion can be drawn partly from the radical transformation of the structure of the economy. The preponderance of the agrarian population in employment has come to an end only recently: the proportion of gainfully occupied population in agriculture dropped from 64 per cent in 1910 and 56 per cent in 1949 to about 20 per cent in our time; the rates of employment indicating the threshold of the highly developed stage have also emerged fairly recently, indicated the facts that the proportion of industrial population has surpassed the internationally high 40 per cent and that, after a long stagnation, the proportion of those employed in the infrastructural (service) sectors has begun to increase and is approaching 30 per cent.* Up to the

*Looking back to the shocks of the transitory periods of the world economy, only one point of the excellent analysis of J. Bognár [3] seems to be questionable: he believes that the period of instability in the world economy will last "for 5-10 years at least." Compared with the great transitions to new eras, this seems to be a perhaps over-optimistic forecast as the shocks of the transition, the great changes in prices, the uncertainties of the financial system may prevail throughout a longer period.

middle of the 20th century, agriculture provided the largest, though decreasing, contribution to the production of national income (1910: 62 per cent; 1953: 38 per cent), at present, however, about half of the national income is produced by industry and less than a fifth by agriculture.

In addition to the main characteristics of the structure of the economy (which could be complemented by the tendencies in the structure of foreign trade, also reflecting the level of development), the beginning of a new era is also borne out by the increasing volume and changing structure** of personal consumption, which grew to 2.8-fold between 1950 and 1975.

It is a further characteristic feature of the transition from low to high economic maturity that the *extensive sources* of industrialization (labour involvement) that provided the main sources of economic growth up to the mid- or late 1960s*** *have become exhausted*.

After such antecedents exhaustion of the sources obtains a determining importance merely on the basis of a more advanced level, as the exclusive possibility of further progress remains the exploration of intensive sources of growth, the primacy of technological, organizational and productivity factors.

Hungarian economy is thus passing the threshold of developed level and, with this, has arrived at a new era also in its inner development.

Short and long term effects changing values

The environment in which economic policy can act in shaping the future is determined by the coincidence of the beginning of a new era in the development of the world economy with that of the Hungarian economy, and by the effects of these transitions on the present and future of Hungarian economy. In analyzing the deriving determination we

*According to the micro-census in 1975, the distribution of active population among the sectors of the national economy was as follows: agriculture 22.7 per cent; industry 35.7 per cent; construction 7.4 per cent; transport 7.7 per cent; commerce 9.0 per cent; public administration and others 6.7 per cent.

**A characteristic indicator of backwardness, the preponderance of food consumption, which had a 60 per cent share in Hungary at the beginning of the 20th century and scarcely decreased between the two World Wars, has been eliminated. According to 1973 consumption data, food represents 32 per cent of the total personal consumption, though this figure is complemented to 46 per cent by other consumer goods like coffee, tea, alcoholic-beverages, etc. Clothing represents a further 10 per cent. The proportion of so-called consumer investments – construction, durables – has increased to 17 per cent. This last item is three times as high, and clothing twice as high in countries with advanced industries, with the proportion of food consumption being accordingly lower. These latter proportions can, of course, by no means serve as a basis of comparison, as they show the effects of the different price relations and of manipulated consumption, but they still reflect certain correlations between development level, wealth, consumption level and consumption pattern.

***This is indicated by the fact that while between 1950 and 1975 the value of output of Hungarian industry rocketed to sevenfold, gross output per industrially employed increased only threefold. It is even more expressive that in the second half of the 1960s Hungary was the seventh among 35 countries by the ratio of those employed in industry per 1000 inhabitants, while she was the 22nd by per capita net industrial output. Thus, the technological-productivity factor played an inferior role in industrial growth.

must try to distinguish short and long term effects as far as possible. Confusion, rather than conclusions opening up the horizon, may be expected as a result of the urging pressure for quick orientation in an atmosphere of innumerable daily changes, shocks and surprises. It is beyond doubt that from the beginning of a new era of the world economy we perceive primarily the burdensome increase in the prices of oil, and primary goods, the foreign trade deficit, and disequilibrium. The domestic change is shown most acutely by the labour shortage in most fields, and in this context, by the excessive employment in clerical positions, by the partial underexploitation of modern equipment, etc. In such a situation it is the primary task of the economic policy to provide the necessary energy sources, to restore the balance of foreign trade and finances, to mitigate the labour problems.

In the fifth five-year plan, started in 1976, the *main* stress had to be laid upon the solution of the emerging serious problems, upon finding an answer to the questions posed by the changes on the world market, threatening our progress, while simultaneously observing the long-term tasks deriving from the higher development level. This has been achieved by the plan as far as it managed to provide for a dynamic economic development and a further improvement in living standards, even if at a modest rate. The solutions devised to restore the balance of foreign trade, and to secure the supply with energy are especially important and form the nucleus of the plan. The latter involves that 40 per cent of industrial investments will be realized in mining, metallurgy, and the electric energy industries, securing thus the solution of energy and raw material supply also beyond the plan period; at the same time, this means that such a high proportion of the development resources will be absorbed that only modest resources will be left for the manufacturing industry enough for a less than average rate of growth.

Beyond these direct and, in the short run, centrally important concerns, economic policy and planning is seeking for further strategic aims, to serve for a longer period. Namely, we can best adapt to the new era in the long run if we orientate ourselves not primarily by reacting to the disturbances and shocks of the transition. The beginning of a new era involves much deeper and longer lasting changes, resulting in the first place in the *transformation of orders of values*. Because of decade-, or sometimes century-old stereotypes, old values survive as natural laws in our consciousness and thinking; and they produce actions as responses to conditioned reflexes. Thus, the elaboration and cognizance of new values has an immense importance. Let us examine this more closely.

The internal economic transition to the new era terminated a process that had lasted for about a century. Within this the period of the socialist transformation was a forced march up to the mid-1960s in order to achieve an industrial breakthrough. In the decades of this historical turn the greatest achievement was the upsetting of the proportions of an economic structure characteristic of the former less developed level, by following an explicitly disproportionate development strategy, through such an economic policy that served rapid industrialization with every means available, including price proportions, wages policy, and the investment structure. In this system of values utmost utilization of the extensive sources of development, the hundreds of thousands of new jobs created with huge investments and the 10 per cent annual rate of industrial growth, exceeding the world average by 50 per cent, achieved through the integration of 1 million new workers into the industry represented the highest values. This was needed for rising from the state

of a relative underdevelopment, from the state of agrar-industrial structure. It was the result of the transformation of old structure, or, it may be said, the price of industrialization, that agricultural development was postponed, as the income produced in agriculture was partly channelled into the state accumulation fund through the disparity of the prices of industrial and agricultural products, and the one million workers migrating from the agriculture to industry were the main sources of industrialization. Although the slow growth rate of agriculture, annually 0.7 per cent, the third of the world average, was also the result of different mistakes, and thus its relative backwardness deteriorated, there could have been hardly any other way found for the realization of industrialization. In a similar manner, a necessary stagnation, aggravated by mistakes, followed in the field of infrastructure as well, to which investment was hardly and now labour practically not at all allocated. The 33–40 per cent of all investments allocated to this sector was significantly lower than the 50 per cent in the preceding 50 years, and especially lower than the 50–70 per cent ratio of infrastructural investment in the developed industrial countries after World War II. In this way, the infrastructure proved to be insufficient to satisfy the increased demand of the productive and consumer sectors, as the reserves inherent in the former superiority of infrastructure over the development standards of productive sectors had been used up.

Thus, in the new medium of the internal transition to the new era, on a higher economic maturity and with more advanced structure values and preferences underwent a change. Under the industrial policy at a more moderate rate based upon up-to-date technology and the *improvement of productivity* as against the fastest possible industrial growth based upon extensive sources, the restoration of the *proportions* corresponding to the higher economic maturity, the necessity of creating a developed agriculture, *approaching* industrial structure, and the demand for a highly developed infrastructure came to the fore. These acute demands were not only recognized by economic policy, but much has been done in the last decade for their satisfaction. It is perhaps the most salient sign of this policy that the wide disparity between agricultural and industrial prices have been gradually eliminated and that the investment pattern has been thoroughly modified. In the first half of the 1970s – in the period of the fourth five-year plan – the investments of the so-called non-productive sectors grew twice as rapidly as those of the productive ones, the proportion of infrastructural investments was higher than half of all investments. With an annual growth rate of 4–5 per cent, the development of agricultural production not only surpassed the earlier rate 6–7 times but this meant a growth rate twice as high as the world average; the 8 per cent growth of infrastructure, of services, rendered this sector the *fastest growing* branch. This cannot be regarded as an incidental regrouping process or a temporary change, but as the assertion of a new, objective order of values.

It is of supreme importance that the present five-year plan of Hungary aims at carrying on with the development principles of the preceding five-year plan as far as possible, aiming for instance, at the attainment of a fast growth of agricultural production and housing construction. However, the exceptional demand for resources of the crucial tasks of restoring economic equilibrium and of the solution of the energy supply does not allow a simultaneous approximation of short and long-term goals during a single five-year plan. Consequently, under the present plan the rate of agricultural growth, having been in

the focus in the last decade and though being an important task in the long run, lost its impetus temporarily; while the growth of all investments is planned to reach 26 per cent, and that of industrial investments 28 per cent, the increase of agricultural investments aimed to reach but 3 per cent. The share of food processing in industrial investments remains at the level of the former plan period (about 10 per cent) and the justified increase of its share has to be postponed.

The structural transformation of infrastructure involved by the transition to a new era cannot be pursued fully, either. While investments into productive branches increased in the past plan period by 41 per cent, and those into the infrastructural sectors by 88 per cent (as a result of the recognition of the need for catching up), in the present plan period the gap is being eliminated: planned investment into productive branches is to grow by 22 per cent and that into the so-called non-productive sectors by 25 per cent. The *share* of health care and service investments actually *decreased* to a minor extent. The share of infrastructure without the energy sector remained constant; this can well be regarded as a relative diminution as to the past in view of the demand for transformation.

Thus, it is a contradiction of our present that while solving a growing number of conflicting short and long-term tasks, by concentrating on the immediate steps to be taken, the full observation of already recognized economic policy aims becomes impossible. This postponement may be inevitable, but this only underlines the importance of the fact that although the solution of certain tasks must be postponed, the main strategy of the development policy remains the same. The new order of values in the world economy underlines this constancy. Although this new order cannot be assessed yet quite unambiguously, as much seems certain that with the collapse of the old values, with the increasing scarcity of foodstuffs, raw materials and primary energy with the often quoted increase of their prices and the consequent modification of the terms of international trade, in general, with their rocketing importance on the world market the traditional yardstick of being more or less developed is bound to change, together with the advantages and disadvantages in international trade implied by their production.

While because of a stereotype conditional through centuries, in the earlier world economic eras the preponderance of the food production in the national economy and in the export activity was conceived, as if it followed from a natural law, to indicate subordination, disadvantageous exchange, in general, a lag, underdevelopment, something to get rid of the seemingly lasting tendencies of the new world economic era, urge us to rethink our values. In the case of Hungary this must be stressed, all the more as the food production is one of this country's few export industries which can exploit the opportunities offered by the world market on the basis of production traditions and especially by relying on domestic raw material resources.

The industry also undergoes a large-scale transformation of values. The lasting increase of the energy and raw material prices (and, notably, the looming danger of environmental damage) represent a new, basically important value in the judgement of development decisions, and challenge the pursuit of certain earlier tendencies. In this situation the development of branches demanding especially much of imported raw materials or energy becomes dangerous not only because the costs of production go on rocketing, thus bringing about radically new, disadvantageous value and sales relations, but also because, by demanding snowballing imports, they continuously increase the dependence of the

economy on exports. By definition, the necessity to import means a necessity to export as well, thus the economy becomes intolerably vulnerable.

Thus, because of the scarcity of raw materials import-substitution, that had characterized Hungarian industrial development from the second and third decades of this century until practically the middle of the 1960s, and which still has its effects on the present industrial structure, becomes disadvantageous. Industrialization was, however, determined earlier by the fact that the import substitution was the easier, faster way of development. Imported raw materials and primary energy were relatively cheap and the sources seemed to be inexhaustible. Although the development of a wide spectrum of domestic production (only a third of the so-called final consumption of industrial products was imported) boosted the import demands, it also produced the exports to balance them. In the new situation, only the production of industrial products with a relatively low demand for raw materials and primary energy seem to be economical in the long run. These developments must, in turn, be export-oriented and efficient enough to be able to pull the whole of the national economy with them. This recognition is reflected by the present five year plan of Hungary in that it provides a credit fund of 45 thousand million Forints for the acceleration of export-oriented development projects; the importance of this fund exceeds that implied by the credit figure.

Transformation of the industrial and product structures, the export-oriented development involving lower demand for raw materials but a higher degree of processing and a man-power range of products, requires, of course, a new quality of selectivity. Not only future developments must be based on these principles, but existing production fields violating them must be phased out. A practical example is the present transformation process of Japan's industrial structure, which may serve as a specimen of strikingly rapid adaptation to the new order of values. According to this policy, the raw material-intensive industries launched in the last decades, are to be gradually "passed on", branches and products representing a higher degree of processing scientific and technological standards are to be focussed upon even more vigorously, agriculture is to be preferred extensively — by 1985, about 125 million people will be supplied with food to an extent of 75 per cent from an arable land area equal to the size of Hungary.*

Introversion or flexible adaptation to the changes in the world economy?

The search for the path of economic policy and the debates on the subject in Hungary in the last one or two years have shown that the recognition of the new order of values is by far not unambiguous. Some wish to find the solution through an intensive foreign

*According to the plan [13] passed by the government of Japan on May 14th, 1976: "A shift in the industrial structure is to be promoted toward resource-saving, technology intensive industries. In line with this, efforts are to be made for the improvement of export structure and for the development of those industries which are in the vanguard technologically." The structure of industry is to be altered; "... to achieve these goals, the nation is to make full use of its plentiful and talented human potential to develop advanced indigenous technology in such fields as information processing." "... Japan's total economy is to be converted so that it consumes smaller quantities of resources and energy." In certain traditional industries, such as the textile industry, and other labour-intensive sectors the development of the internal structure, a greater degree of processing is to be preferred.

economic orientation, some, in turn, through a kind of introversion. This latter group believes that an export-oriented development does not diminish, but rather increases dependence on foreign markets, the vulnerability of Hungarian economy. For this reason, they say, Hungary should produce whatever she can and should buy the least possible on the world market, and become as independent from it as possible. Some believe that trade with capitalist countries should be reduced to the minimum, foreign economic relations should be based as fully upon the socialist countries as possible, since in this way the disturbances deemed to pertain to the problems of the capitalist world can be avoided. However, what we witness is a *world economic* transformation in which Hungary is also involved, and not some kind of an exclusively capitalist crisis. In our world there is no way to retreat from the *world market*. The trade between the socialist countries is also part of the system of the world economic relations. The prices applied in intra-CMEA trade follow the prices of the world market. (Even if they are not equal to them. In the last 20 years, these prices were adjusted to world market prices every five years, now they are set every year at the average level of world market prices in the preceding five-years). The present progress of the integration of the CMEA itself demands and makes possible precisely a selective development and provides thus advantageous conditions for the satisfaction of the requirements of the world economy and not for isolation from them.

On the basis of the endowments and the development level of Hungary introversion is no longer a real alternative but a *blind alley*, a *self-betrayal*. Import substituting industrial development can boost only a less industrialized economy and it often entails disadvantages even in that case by hindering the technological improvement of productivity. It will be in place to remind the reader to a less well-known thesis of Friedrich List the famous German theoretician of the protectionist, import substituting industrialization policy (whose impact through Kossuth on Hungarian public economic thinking was considerable), according to which isolationist development can be advantageous only in a special historical period, during transition from the agricultural to the industrial structure of the economy. In the case of small or medium-size countries, the only way to advanced economy known in history leads through selective export-oriented development. By producing efficiently large quantities of a small number of technically competitive products for a large world market the needs of Hungary can be satisfied under incomparably more advantageous conditions than by trying to produce the majority of the necessary products on our own under less advantageous conditions. The significance of a maize yield of 7,000–10,000 kilogrammes per hectare*, the large scale industrial production of poultry matches that of petroleum extraction; through the program for the development of bus production, and in exchange for the products of the pharmaceutical or electrotechnical industries Hungary can import cars and a part of investment goods under more advantageous conditions than by producing them on our own.

Thus, the Hungarian economy will become not more but less vulnerable if it exploits the advantageous conditions of the world market and if it mitigates those which have become less advantageous. In the system of mutual dependence prevailing in the world economy this is the sole sensible policy.

*roughly equal to 6240–8900 pounds/acre

However, we must challenge the ideas according to which, as a result of the beginning of a new era, the Hungarian national economy must become more extensively oriented toward foreign economic relations. These conclusions seem to be exaggerated on several counts.

First of all, it must be noted that although an up-to-date development of industry is only possible with export-orientation, on the basis of cooperation and integration, in other words, through stepping up the foreign economic activities the *whole* of the national economy is subject to opposite tendencies *as well*. As it is, the important effects of the external and internal transformation also *hinder*, simultaneously, the acceleration of foreign economic orientation as far as they underline the increasingly important role of the food economy* and demand a faster than average growth of the infrastructural sectors of services. Agriculture is a strongly export-oriented sector, but it is less import-intensive, and the infrastructural fields can be developed more easily within the framework of an autonomous national economy than other sectors. We can add to this that, according to the tendencies formulated in Engel's law, on a higher stage the increase of consumption shifts from foodstuffs and material goods to services.

This all may hinder the accelerating increase of foreign economic orientation. From this we may draw the conclusion that in the long run, supposing the right response, the tendency and growth rate of outward economic orientation will not increase.

After these considerations, is it unrealistic to fear from a greater economic vulnerability? Certainly not! A smaller number of products manufactured for exports, and dangers of stagnation of food production for lack of external markets may well make the economy more vulnerable if it is rigid, incapable of switching to new products, of flexibly responding to price changes (which can well be anticipated in the coming decades, too). This concern cannot be called unfounded even by arguing that the more developed the economy, the more flexible it becomes. Thus, if it is well adapted to the conditions of the new era, if it can progress *dynamically*, then the danger of a lack of flexible response becomes increasingly remote.

Economic flexibility is, namely, perhaps the most important and far from an automatically fulfilled requirement of the transformation. If the necessary flexibility is missing, the economy of a country may be seriously afflicted by the same economic effect of which another can make a huge advantage by flexible response.

It is a paramount lesson of historical development that at times of great transformations only those countries could retain or improve their positions that were able to exploit the opportunities through their ability of flexible adaptation. Of the treasures of the New World Spain could grab the most, but it was Flanders, the Netherlands and England that could respond flexibly to the new world economic conditions emerging from the 16th century on. The result: Spain gradually sank to the class of backward countries. During the 19th century transformations, Denmark showed an exceptional flexibility by switching from corn production to that of butter and pork, and through the export oriented development of these industries she joined the ranks of the industrialized countries by the first World War. Sweden switched from the former extracting industries to the most up-to-date industries of manufacturing, and changed its overwhelmingly

*agriculture and the food industry

agrarian-extracting structure for a most advanced industrial one. This same transformation gave a heavy blow to Portugal, Greece, and to most of the East European countries, which were incapable of flexible adaptation; these suffered long lasting damages from the fall of agrarian prices on the world market. Their outdated structure and backwardness was preserved.

The effect of the same changes in the terms of trade may be the opposite, according to the sufficient degree of flexibility in individual countries. For instance, the result of the continuous improvement of the terms of trade between 1860 and 1960 (20 per cent until 1914 and 30 per cent in the following period) was a continual slowing down of growth in Britain, while the deterioration of the terms of trade (40 per cent between 1880 and 1936), that took place practically up to the sixties produced an unprecedented acceleration of growth in Japan. [14]*

The basic conditions of flexible response

However, flexible adaptation is not simply a question of recognition, it does not depend solely on how the economic policy *intends* to react. Flexible adaptation has its internal conditions, the inner factors determine the limits of response. In his context the systems of planning, control, regulation, or, in connection with them, the possibility of flexible *entrepreneurial* response and stimulation obviously play an important role. At this place I do not deal with this question whose main aspects have been thoroughly elaborated.

Another undoubtedly important determining factor of flexible response is the development of the internal structure, and, within it, the development standard of infrastructure. The more highly developed the infrastructure, the more flexibly the whole of the economy can adapt and *vice versa*. The backwardness of construction activities, the low degree of supply with public utilities, the deficiencies of the storing and transporting system, the ailments of telecommunications slow down right from the start, or even paralyze responses that would regroup production, the realization of new technological strivings. The backwardness of services, widespread queuing, poor health care, unsolved problems of institutional child care, an unsuitable schooling system, and generally the problems piling up from the insufficiency of "consumer infrastructure" affect also productivity, efficiency, and work ethics, and finally produce an indifferent, insufficiently trained, unsuitable labour force and determine the standards of management and control on various levels. All these combined result in a slowly changing and responding economy. Thus, satisfactory development of the infrastructure, both of the so-called

*It reflects the multifariousness of the effects that only in one period of English economic history can we find a deterioration in the terms of trade, between 1820 and 1860. In the latter year 50 per cent more had to be exported for a unit of imports than in the former year. These decades meant, however, the fastest growing period of the British economy. In Japan, before World War II 60 per cent more had to be exported for a unit of imports than 50 years earlier. This caused not only the loss of a part of the national income produced, but also an unprecedented acceleration of productivity, and, through this, of growth, made possible by the exceptional ability to respond flexibly. (The work [14] referred to primarily gave a summary of the basic statistical sources of the subject.

productive and of the "consumer", service infrastructure in the widest sense constitutes a basic condition of economic flexibility!

However, economic flexibility does not depend solely on entrepreneurial mobility and the advancement of infrastructure. The latter have already revealed human factors. As we reach deeper and deeper strata of economic history analysis, it becomes increasingly obvious that the growth, and the laws of the economy can be explained to a diminishing extent by merely economic factors. Economic flexibility – or the lack of it – cannot be derived from purely economic causes, either.

By waking up from the economism of growth theories, as the excellent K. Polányi put it from the 'formal' interpretation of the economy, in which the movement of the economy was simply interpreted as a chain of economic acts, the economic reasoning of our days, begins to rediscover the 'substantive' meaning of the economy, it begins to regard the economy as an institutionalized process of interchange between man and nature. (See: [17]). But however much the approach to the economy, recognizable with Aristotle in an embryonic form and elaborated by Marx, which denotes the place of the economy in society as a part of a general thesis concerning the whole of human community may seem to strengthen, in our days the criticism of Gunnar Myrdal is still generally valid, with few exceptions: "In presenting their concepts, models, and theories, economists . . . emphasize that in the last instance development is a 'human problem' and that planning means 'changing men'. Having thus made their bow to what they have become accustomed to call the 'non-economic' factors, they thereafter commonly proceed as if these factors did not exist".

As a matter of fact, the flexibility of the economy, its ability to quickly adapt to the new conditions and opportunities depends, according to historical surveys, on the very 'human factor'. One precondition is satisfactory *mobility* of the society, which is a complex system of relations itself. We can hardly deal with its social and settlement-structural aspect, the class background at this place. Let me mention, however, its organic relation to the system of education and vocational training. The high level of general training and culture, measured by the standards of the age, is a determining factor, of rapid economic response, of the ability to change the sectoral and product structure. This provides the basis for a flexible transformation of the vocational structure. (A main factor of the exceptional flexibility of the Scandinavian countries in the 19th century was the special development of their *educational systems*, ahead even of the level of the educational achievements of West European countries. The same can be said about Japan where, in spite of the relative backwardness of the economy the educational system has always reached the standard of the economically most advanced countries in the world.* Without this, the degree of flexibility of the Japanese economy and the special ability to 'follow' could hardly be understood.)

At this point, one must search for the *connection* between education and economy, or, as one might put it, between *educational* and *economic* policies. I venture to state that such points of contact are largely missing even from Hungarian economic policy practice

*At present, roughly 97 per cent of the given school age generation take part in secondary school training, i.e. finish 12 classes and 40 per cent receive higher education.

(as the preparation of long-term manpower and vocational training plans could not be taken as such even if they were asserted consistently in educational policy.) This is understandable if we add that even the scientific recognition is yet to come.* Indeed, it is not only some new educational policy findings, following from the inner laws of the development of science and education that are in question — the stress laid on the primary role of the stage and forms of general education as an opportunity to follow the scientific and technological development, but it is *also* a point that this task of education has become one of the *basic* conditions for the achievement of economic flexibility. Failure to improve the general educational foundations preserves our weakness in respect of mobility, the stressing of vocation-oriented training forms contributes to a greater rigidity of the vocational structure. To satisfy the basic economic policy requirement of the coming decades, the ability to adapt flexibly to the changes in the world economy, implicit also in the changes and adaptation required by the higher development standard, Hungary must lay the principal foundation: it must lay the basis in the present for the transformation of vocational structure, flexible adaption, retraining and follow-up training in the light of the ever higher vocational, technological and scientific demands.

In other words, *educational policy has become one of the key issues of present Hungarian economic policy*. This, recognition in turn, leads up to the necessity of rethinking the stereotyped questions and our answers to them, our whole traditional system of values from this aspect. We must now reconsider the former direct or indirect subordination of wide areas of social and economic development to the breakthrough of industrialization in the last decades of Hungarian history, reconsider the consequent limitations of the socialist goals of the development of training and education, limitations they had manifested themselves also in the allocation of funds to training. With a certain degree of exaggeration we may even state that while in our economic order of values up to now the development of training was, largely necessarily, determined by economic development, in our new, future-oriented system of values the mutual determination of economy and education may be reversed: the development of training may determine the development of the economy. To merely mention some far-reaching interrelations, let me refer to the wage policy aspects of the correction of the system of values.

The effect of the system of wages and incomes

It is a commonplace in Hungary that the salary of teachers is low. This is made obvious by the sole fact that the national average of the salary of teachers working in public education is 2.700 Ft a month, that is, about 10 per cent lower than the national average

*In assessing the works dealing with the connections between education and economy I find the criticism justified according to which the present 'choice', the alternatives of the *economic* or *sociological* approaches to the problem are insufficient. The former aspect considers education as something 'responding' to the needs of the economy, and 'delivers' one of the important factors of production. The latter aspect focusses on the social function of education. The greater part of the literature and research, thus, failed to link up really the economic with the social, although economic relations are, in the final analysis, social relations. Though this criticism is directed toward the researches concerning capitalist countries [19], its basic considerations deserve attention also in Hungary.

of workers and employees. It is obviously a related fact that the number of unqualified teachers is increasing. Forty per cent of teachers the presently employed started working without the qualification required for the given level, and only acquired the necessary qualification afterwards, at part-time and corresponding courses. It is far from being a novelty that the applicants to this vocation are almost exclusively women and the loyalty to the profession of those qualified as teachers has to be secured through a system of controlled employment etc. These are, of course, serious facts in themselves. They have become increasingly central issues of Hungarian educational policy. From the economic policy aspect, however, the order of values we have had *so far* has only led to the conclusion that the situation must be improved to the extent allowed by financial possibilities. The basic redefining of Hungarian wages policy is yet to be done: it must be revealed how present wages and incomes proportions were formed, at the service, under the image of what economic policy tasks, on the basis of what value premises, and whether they do not already defeat the present economic goals of Hungary. The question is extremely important and, of course, far exceeds in importance the field of education and training.

However, the wages proportions are close linked to our present line of reasoning, since from the aspect of *economic policy* requirements the payment of teachers cannot be restricted to how much more the national economy can afford to pay. From the economic policy aspect we can only approach the question if we rely on the recognition that the presently effective system and structure of wages was formed at the service and under the influence of the breakthrough of industrialization. Industrial activity was, thus, preferred to infrastructural activities, among other things. (Not in the last place thus securing the abundant source of labour for the extensive industrialization, restricting the possible counter effects or labour absorption of infrastructure.) This determination proved to be stronger than the criteria of the complexity of work and/or of qualification.

The higher economic maturity of Hungary has taken up the question of improving the system of wages and incomes for some longer time already. It is also demanded by the necessity to eliminate the lag of backward branches. This latter has not only rendered inevitable to alter investment proportions in favour of formerly neglected branches; it has also demanded similar changes in the price system, as without this latter a catching up would be unthinkable (also because under a price system serving industrialization even the real structural proportions are hidden; furthermore, this industrialization oriented price system continuously drains incomes away from other sectors and hinders their development). Conservation of the old relative proportions of wages and incomes by sectors acts similarly against structural transformation, especially since labour shortage has become general. These proportions fail to provide sufficient incentive in the very fields to be improved, they aggravate the relative shortage of labour and deteriorate the standards of available labour. Thus, no real change can be achieved without understanding that the transition to a new era in the economy connects historically and puts on the agenda the transformation of the structure of wages and incomes, together with the main development tendencies of the economy. The relative wages and incomes proportions, justified by the revaluation cannot, of course, be realized by a single, radical step, and probably not even through a transitional period of one or two years; the only solution can be achieved by a succession of necessary, realistic measures over a long period, with all leading toward the goal. The least advantageous

solution is the informal correcting system of everyday reality which creates a 'balance' between the wage proportions through many informal (and immoral) channels in a particular manner.

Education, and within it, its material supply and the payment of teachers is, thus, an integral part of the system of new value premises created by the transition in the economy, it is a part of important new conditions of development insofar as it is one of the tools for providing the crucial economic flexibility, and, in this context, it obtains primary importance for economic policy.

Intellectual and psychological factors

The social and human factors, pointed out as the ultimate reasons of economic flexibility cannot be restricted to merely educational-vocational aspects. Social behaviour, the existing moral standards affecting it, prejudices, notions, ideas, and ideologies penetrating and influencing society, are at least as important. In a less well-known, but very important thesis Marx drew attention to the socio-psychological aspects of class situation. As he pointed out, class situation is far from being merely economic determination, it is also a system of emotional relations carrying traditions. This latter determination may manifest itself also in economically irrational actions. Under capitalist conditions, for instance, in an atmosphere of backwardness non-profit oriented motivations survived, which, awarded a greater social status to land than to more profitable business undertakings. Similar motives preserved – even in the behaviour of oppressed classes – adherence to, and the values of, the trade, left over by the hierarchy of the guild – instead of orientation towards higher wages. Economic backwardness preserves traditional forms of behaviour, and these manifest themselves in instances of irrational social rigidity, deriving from extra-economic reasons, and inconsistent with the new system of values.

The rank of offices, the status of clerical positions, the hierarchy of diplomas, degrees and grades, their fetish often erect peculiar obstacles, inexplicable on a rational economic basis, in the way of social mobility and, with this, of economic flexibility. This is closely related to the important thesis of G. Lukács, who, following Marxian reasoning, stated that backwardness afflicts not only by its being an economic fact but also by its ideological consequences, which often lead to a "fetishized glorification of backwardness." [20]. This is how social distortions, distorted mentalities could become proudly claimed national peculiarities, this is how bad reactionary tendencies of the gentry, romantic anticapitalism praising waste-making and despising economy as an "nonindigenous" sin could be elevated to a lasting order of values.

As they are not merely 'reflections' but factors having acquired independent existence the intellectual and psychological elements survive the causes that had given life to them. They also infiltrate the new, more highly developed social relations and they also pass the threshold of the developed level of economy. Besides, eradication of their causes, elimination of the formations that have become independent is also important, the destruction of outdated views, prejudices, of fossilized behavioural and moral standards is also essential. This is how the formation of the minds in a wider sense can itself become

the creator of primary economic conditions, and public education and culture in a wider sense a crucial instrument of current economic policy. In the present economic policy of Hungary only some elements of these can be recognized as yet.

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НЫНЕШНЯЯ ВЕНГЕРСКАЯ ЭКОНОМИЧЕСКАЯ ПОЛИТИКА —
В ИСТОРИЧЕСКОЙ ВЗАИМОСВЯЗИ

И. Т. БЕРЕНД

Современный энергетический кризис и драматические сдвиги в международных условиях торговли автор расценивает как явления, сопровождающие смену исторических эпох мирохозяйственного развития. Эти явления свидетельствуют о ломке традиционной системы мирового разделения труда между группой индустриально-развитых стран и периферийными странами, поставляющими сырье и продовольствие.

Для Венгрии эта смена эпох мирохозяйственного развития совпадает со сменой эпох в развитии ее национальной экономики — переходом от отсталой аграрно-индустриальной экономики к высокому уровню экономического развития, что сопровождается быстрыми и резкими сдвигами народнохозяйственных пропорций, условий труда и образа жизни населения.

Автор подробно рассматривает в статье, как меняются объективные условия экономической политики, какая переоценка ценностей вызывается ими. Автор на исторических примерах показывает, что страны, способные гибко приспосабливаться к меняющимся условиям, в конечном счете могут обратить на свою пользу даже поначалу неблагоприятные изменения, в то время как страны, застывающие в статическом положении, не могут избежать спада даже при благоприятных для них условиях мирового хозяйства.

Способность к гибкому приспособлению зависит от целого ряда факторов — от системы планирования, управления и регулирования, от степени развития инфраструктуры и т. д. Особенно же большое значение автор придает человеческому фактору — общественной мобильности, зависящей во многом от качества системы народного и профессионального образования. В заключение автор останавливается на задачах перестройки и развития нынешней системы народного образования в Венгрии, считая это ключевым вопросом экономической политики на длительную перспективу.

A. SIPOS

AGRO-INDUSTRIAL INTEGRATION*

The agro-industrial integration developing on the basis of the scientific-technological revolution transforms the traditional method of production, distribution and consumption of food-stuffs and parallel with this also the socio-economic relations. The author examines the development of this process with special regard to its forms developing in the socialist countries at present.

Agro-industrial integration is a universal phenomenon of our age taking place in both the capitalist and the socialist countries, although in different ways and with varying contents. Experiences obtained in the socialist countries indicate that with the progress of socialist society the agro-industrial integration is of increasing importance both theoretically and practically. Namely, agro-industrial integration is not only an economic process. It is also a highly important socio-economic one, since it furthers the development of socialist production and ownership relations, it breaks the way for the approximation of industrial and agricultural work, the situation of the working class and the peasantry, respectively, as well as for the elimination of major differences between village and town.

The quantitative and qualitative development of ownership relations is an objective necessity in socialism, a consequence of the development of the forces of production. This is a many-sided and complicated process involving changes in the material basis of property, a rising level of socialization, a more consequent assertion of the principle of socialist distribution, a deepening cooperation between various sectors of the national economy, industries and enterprises, perfection of the system of economic control and management as well as changes in socio-economic relations. In consequence of these changes, during the progress of socialist society, both state and cooperative ownership change and develop, the two forms get nearer to each other and grow, after all, into a higher form of socialist ownership, *i.e. communist public ownership*. However, the development of ownership relations is not an end in itself, its importance lies in that it promotes the further development and more efficient utilization of the forces of production in the interest of the society. In its final stage the agro-industrial cooperation creates the conditions for a synthesis of industry and agriculture at a higher level, for the merger of agriculture and industry.

The conditions for the socio-economic approximation and interpenetration of agricultural and industrial production have been maturing in the course of a longer historical development. One of the basic factors of this process is the qualitative change in the forces of production.

In consequence of the scientific-technological revolution developing after World War II the technical basis of agriculture basically changed and the spreading of industry-like mass production can be observed in more and more branches of agriculture. The spreading of

*On the basis of the author's inaugural lecture read at the Academy of Sciences on March 30, 1977.

new technological and biological methods, the wide-range application of advanced technology, the breeding of more productive species of animals, as well as the application of several important discoveries and new organizational principles have all had a revolutionizing effect on agriculture.

In consequence of the scientific-technological revolution taking place in agriculture this branch has become a capital-intensive branch from the previous labour-intensive one. Manual work is more and more replaced by machines. The productivity of agricultural labour rapidly increases, in most developed industrial countries even more rapidly than that of industrial labour. In a growing number of countries agriculture and its branches, respectively, gradually change over from the manufacture (handicraft) phase to the stage of manufacturing industry.

Technological development necessarily brings about a deepening specialization and division of labour, consequently, also the necessity of production cooperation and concentration. Efficient utilization of the high performance prime movers and machines manufactured by the industry requires the increase of plant and production sizes, because up-to-date means of production can be efficiently utilized only in this way. We can say that concentration and specialization of production are processes concomitant with the development of the forces of production. This explains why horizontal integration is advancing both in the capitalist and in the socialist countries, although its contents and consequences are considerably differing in the two social systems.

This process has considerably advanced in Hungary since the socialist reorganization of agriculture, although not to the same extent in every branch. Since the early 1960's the number of state farms decreased from 271 to 141 by 1976 and that of the co-operatives from 4500 to 1470, while the average area of state farms increased to 7000 ha* and that of the co-operatives from 1190 to 3400 ha. These plant sizes are usually suitable, with adequate management and organization, to provide proper frameworks for the development of industry-like production. Of course, some rational fusions of farms will be required also in the future, but the endeavours aimed at the unfounded amalgamation of co-operatives in large numbers cannot be accepted. At big farms which were mechanically amalgamated higher standards of large-scale farming, technological development and perfection of plant and work organization do not always follow the increase of farm sizes in a complex way. According to experience a not properly founded amalgamation of farms may eventually even decrease the efficiency of production and thus run against the realization of our economic policy objectives, too. For example, labour-intensive plant-growing might be hindered, consequently labour force released, which increases problems of employment. Another problem is caused by the fact that personal incomes are increased at a faster rate than planned. Namely, there is a natural endeavour at big farms formed by amalgamation to adjust incomes to those in farms ensuring the highest earnings before the amalgamation, independently of the fact whether production has been raised and its efficiency improved after the amalgamation or not.

It can be observed, in general, that in the period of the scientific-technological revolution technological development is faster than enterprise sizes could be adjusted to it. Under such circumstances it is especially important to take into consideration that the

*1 ha (hectare) / 2.47 acres

amalgamation of farms is not the only feasible way of the concentration and specialization of production. Experiences obtained in some socialist countries – and also domestic experience – prove that if the farm size does not ensure an efficient application and utilization of developed technology, associations of various types provide adequate forms of motion for the solution of this contradiction. These similarly horizontal inter-enterprise relations, first of all the production systems, have proved in practice that they are efficient means for the development of some branch of production based on industry-like technologies. Therefore, great attention should be paid to horizontal enterprise relations also in the future. The importance of various forms of joint undertaking is outstanding also when the funds of the individual agricultural forms are not enough to establish production units of optimum size – mainly in animal husbandry. In such cases financial funds necessary for establishing such units can be ensured by association.

Vertical integration in the capitalist countries

Also the developed capitalist countries show some example how contradictions can be mitigated between possibilities created by the scientific-technological revolution as well as the requirements and the existing agricultural structure, respectively. This form is the *vertical integration* reflecting and serving new demands of concentrated big enterprises of the food industry and the trade in foodstuffs. Vertical integration is, namely, a precondition of, but also a reason for the establishment of agricultural enterprises which realize a largely mechanized and specialized factory-like mass production. Agricultural units participating in the system of vertical integration already produce large quantities of some products and try to achieve that their products be of uniform quality as much as possible because this brings economic advantages for them. It is in their basic economic interest, too, that the products produced in large quantities should be sold.

An important factor of the integration of agriculture and industry is the growing importance of *food processing* and *trade in foodstuffs* deriving from *changes in consumers' demands*, owing to higher living standards, increased employment of women, the spread of refrigerators, transformation of buying habits, etc. Demand for *processed* foodstuffs is increasing: consumers more and more look for well prepared, ready-for-cooking goods. Nowadays an ever increasing part of agricultural products is processed by the food industry or prepared in some form before getting to the trade and the consumers.

The changes in consumers' demands are indicated by the decreasing consumption of traditional and less expensive foodstuffs and the increasing share of more valuable ones. While a permanently decreasing part of household expenditure is spent on foodstuffs, there is an increase in the real value of foodstuffs consumed. (For example, in the developed capitalist countries this increase reached 100 per cent during the last 50 years.) The proportion of foodstuffs processed at factories increase especially rapidly within consumption. This development is still going on and is steadily accelerating with the changes in consumer habits and sales forms.

This process is characteristic also of the socialist countries, although – because of a relative underdevelopment of the food industry – the proportion of processed agricul-

tural products is still lower here than the similar indicators of developed capitalist countries. Modernization and development of the food industry are essential requirements in the socialist countries including Hungary. This is necessary not only for improving domestic supply, but also for the expansion of export possibilities.

A significant transformation took place and is still going on also in the organization and technology of the trade in food. The concentration of this trade and the spreading of self-service and other new types of sales forms considerably increase the requirements towards products of agricultural origin, too.

Thus, traditional agriculture is becoming more and more a link in the process of food production made up of many partial functions, while agricultural production turns into a branch producing raw materials for the food industry. This, on the one hand, stimulates the concentration of agricultural production and, on the other hand, necessitates the development of new forms of integration. Deepening cooperation between agriculture and the branches preceding or following it in the chain requires a better coordination of activities at the various vertical stages of food production.

It must be taken into consideration as well that industry-like mass production has become widespread not only in the production of agricultural end products, but also in various phases of the production process within the agriculture. In these vertically connected production processes which are carried on in separate units the full output of units realizing the individual stages is simultaneously also raw material for the next stage, until it will be released by agriculture as an agricultural end product.

Technological connections established between individual vertical stages necessitate coordination also beyond that on the market and in realization, namely, *coordination of production and technologies*. This necessity is characteristic both in socialism and in capitalism in a certain period of development.

This appeared first in the history in the United States — where agriculture began to be industrialized first in the world — and was called by the American agricultural economist H. J. Davis vertical integration. The essence of vertical integration lies in the *coordination of connected* activities in the production of the end product and in the concentration, under a united decision-making power, of the various phases of food production, namely, supply with the means of agricultural production, agricultural production, processing of products as well as their distribution. [1]

Thus, the essence of vertical integration is the concentration in one hand of the decisions referring to various phases. *Formally*, one of those participating in the process of food production, the integrator, concentrates the decisions referring to the other phases in his own hands. *Contentually*, however, vertical integration means the integration of agriculture by big industrial and trading enterprises. Namely, as against production cooperation in other branches, the vertical integration of agriculture has the peculiarity that here the activities of units with highly different economic power are coordinated. Atomized agricultural units still with modest economic power as compared to industrial ones are facing strongly centralized industrial and trading enterprises. From this results that the farm can never be the one that dictates conditions, nor can be the integrator coordinating decisions. If we consider the power relations among those participating in vertical integration it becomes obvious that the object of integration is agriculture itself.

On the other hand, vertical integration — as has already been pointed out — furthers *the development and spreading of factory-like mass production* in capitalism. By overcoming the barriers of small-scale production the contractual form of vertical integration results in such changes in production relations which give scope to the further development of the forces of production within capitalism, although to a limited extent. Specialization concomitant with integration allows, namely, farmers to accommodate themselves better to technological requirements when establishing farm sizes. Integrators try to get rid of producers with low efficiency as soon as possible, since these mean too great risks for them. These producers are then ousted and production gets concentrated on the bigger farm. In this way vertical integration promotes the concentration of agricultural production.

Thus, only those agricultural plants can survive in the framework of vertical integration which are able to *steadily* increase their output by increasing capital investment. Namely, the integrator strives for as much profit as possible by concentrating the production factors under his control. This endeavour of industrial and trading enterprises almost automatically brings about expansion of the size of units involved in the integration. Namely, the bigger the production unit, the better the economic and technical assistance of the integrator can be utilized, and therefore, the costs of gathering the products will be lower, too. Centralization of decisions makes possible for the integrators to exercise pressure on the agricultural units involved in the integration in order to realize their own objectives. It can be observed, in general, that the big enterprises establishing vertical integration on contractual basis do not increase the number of units involved in the integration, but strive for increasing production in the agricultural units involved in the integration and for improving the quality of products.

In capitalism vertical integration is such organization of the reproduction process which ensures the domination of monopolies in agriculture. Decisions of the farmers are strongly limited, they more and more lose control and with regard to their economic position less and less differ from wage-workers. Therefore, vertical integration strongly increases the farmers' dependence on capital and thus dispels the illusion connected with the independence of peasants.

Considering its formation, vertical integration has two basic forms, namely, integration based on ownership and contract, respectively. In the first case when the production and processing of raw material, eventually even the realization are united in a single enterprise from the viewpoint of ownership we can speak of a combine. In the second case — being the predominant form at present — the right for decision-making is ensured for the integrator *by contract*. In most cases the integrator is a food industrial or trading big enterprise. On the other hand, vertical integration is spreading in capitalist countries also on cooperative basis as a way of protection against capital. In this latter case a high-grade concentration of the production and processing of agricultural products is established by the farmers and, being the integrators themselves, they will also enjoy the advantages connected with integration.

At present there are no comprehensive data available concerning the weight of integrations based on ownership in the individual capitalist countries. However, it may be stated even from the relatively few data that this form of integration is spreading. According to experiences the contractual form is usually preferred by the integrators to

the integration based on ownership. One of the fundamental reasons for this is the low degree of concentration of agricultural production. Because of this fact there is no possibility for big industrial enterprises to fully utilize their capacity when selling to or buying from the individual agricultural units. Moreover, the production programme of farms considerably differs from that of the processing enterprises or those delivering means of production. In these latter the degree of specialization is much higher than in agricultural units. Although several factories processing agricultural products (first of all cold-storage and preserving plants) process various products in order to better utilize their capacity, their production programme is not in harmony with that of the farms. In such a case a joint enterprise management would still need additional purchases of agricultural products from outside the integration which, again, would mean additional risk. Moreover, also the selling of by-products and not realizable within the own plant would mean an additional burden. From all these it follows that big industrial enterprises processing agricultural products may attain higher profits if they enter into a contract with farmers on the delivery of raw materials. The situation is the same in the case of big industrial enterprises delivering means of production to agricultural enterprises. In connection with poultry raising K. Skovgaard wrote in the mid-1960s that "up to now it has better paid for the integrators if they ensured the products by way of contracts concluded with farmers, since thus they could save the investments necessary for productive projects. Especially advantageous is the circumstance that in such a way they obtained a cheaper and more efficient labour force than by full integration." [2] Integration based on ownership became predominant in poultry meat production only when, with the increasing profitability of poultry raising, the importance of wage costs decreased. An increase of the number of animal husbandry farms (not requiring land) established by big industrial enterprises, resulting from the high level of mechanization and the spreading of automation, can already be observed, apart from roast-poultry breeding, also in egg production, cattle- and pig breeding at present. In general we can say that with technological development in agriculture the condition develops for industrial and trading enterprises to invest their capital with adequate profits in the branches mentioned. It is probable that the number of such enterprises will increase in the future, which may result in a sharpening competition on the world market, too. However, further research work is needed in order to take a well-founded stand in this matter. This is important also because exports to capitalist countries are of great importance for Hungarian agriculture. An inadequate evaluation of the development trends on the capitalist world market may unfavourably influence the export of our agricultural products.

Agro-industrial integration processes in the socialist countries

In socialist countries – contrary to capitalism – agro-industrial cooperation and the industrialization of agriculture can be realized under different and more favourable socio-economic conditions.

The socialist transformation of agricultural production based on small farms had been an objective necessity in a given phase of the building of socialism. Recognizing this

circumstance, the socialist state initiated "from above" the transformation of relations of production in agriculture, the establishment of social ownership with the parallel development and many-sided promotion of the productive forces of agriculture, thus eliminating the obstacle to the development of productive forces caused by the fragmented agrostructure. Nowadays, agricultural development already takes place on a large-scale basis, on state and cooperative farms in most European socialist countries. In socialist countries where this process has been completed socialist production relations have become dominant. State and cooperative ownership are *the same type* of socialist ownership: therefore, the domination or subordination we have seen when analyzing vertical integration in capitalist countries are excluded from their interrelations. Relations between and integration of industrial and agricultural units have to be based on equal rights of enterprises and on mutual advantages, which is, after all, a public interest.

However, these objective advantages of socialism do not automatically develop at the various stages of food production, but postulate many-sided, conscious social activity both on the part of central organs and on that of the enterprises.

Socialist countries needed some time to recognize the objective advantages of agro-industrial integration and to enforce them consciously. In most countries – thus in Hungary, too, – the division of labour, specialization and cooperation of enterprises were one-sidedly interpreted in agriculture for a long time. (Cf. [3]). This was reflected also by the fact that even the simplest industrial activity otherwise strictly connected with agriculture had been forbidden by legal rules. A change in this respect took place at the end of the 1960s, while the development of a uniform view and of progressive tendencies could be observed at the beginning of the 1970s. Nowadays, the task of state and cooperative farms is not only to increase agricultural production taken in a narrow sense, but also to further the development of related industrial services and of food processing. These activities are based on the consideration that specialized, large-scale farms working at higher technological level may produce an ever increasing volume of products by applying industry-like production systems. The profitability of production – just as in the industry – also requires, however, industrial repair and servicing activity, indispensable for the production of finished products as well as internal cooperation. The production of large quantities of raw material for food makes not only possible, but eventually – to an extent differing by branches – even necessary that large-scale agricultural farms process their products or a part of them themselves and even sell them directly. Otherwise a part of the easily perishable products produced would be spoilt or could be utilized only partly.

At present there are already some socialist countries – also Hungary – where all economic activities which are indispensable preconditions of the realization of extended reproduction within the vertical stages of food production (repair of machines, construction, maintenance, processing, transport) belong to the production line of agricultural large-scale farms. In some cases it can be observed, too, that agricultural large-scale farms successfully participate in the manufacturing of such agricultural machines whose production is not undertaken by the machine industry. (For example, in Hungary the Agricultural Combine of Bábolna fulfils not only domestic needs by its self-produced and tested cereal-driers, but produces them also for export.)

The *processing of foodstuffs* is of great importance in the complementary activity of agricultural large-scale farms. In Hungary for example, this activity has been steadily expanding in recent years and the income of farms resulting from this activity exceeded 10 thousand million forints in 1975. [4] Vertical cooperation within agricultural large-scale farms is thus expanding in the socialist countries, resulting also in new formations from both social and economic points of view. Here belong, for example, the *combines* or the so called *agroindustrial enterprises* (kolkhoz plants, sovkhoz) in the Soviet Union, whose function is no more limited to plant growing and animal husbandry, but is extended also to industrial activities resulting from their internal development.

Combines may have a substantial role in the development of agriculture and the deepening of relations between industry and agriculture. Combines functioning at present in Hungary have developed from vertically organized state farms. Combines can be formed, however, also with the participation of several enterprises by analogy with agro-industrial unions. In certain combines a complete vertical chain can be established. It is worth considering, for example, to establish also such combine including several enterprises where the individual enterprises preserve their independence. It would be especially justified to take this point of view into consideration in the future when establishing new food plants of small and medium size, because this has several economic advantages. Thus, for example, it is advantageous to process locally raw materials produced in a given region. This improves the supply of inhabitants in the region concerned, eliminates superfluous transportation which results in cost savings and prevents also the perishing of raw materials (e.g. meat, milk).

In socialist countries various forms of relations have developed between industry and agriculture, influenced by national particularities and the potentialities of the individual countries. In the development of agro-industrial integration also a certain graduality can be observed, i.e. there is a development trend from looser forms of cooperation towards advanced association and integration, respectively. There is no possibility here to analyze the sometimes important differences between various forms, therefore, I must be content only with thesis-like references. The problem is made more complicated by the fact, too, that in some socialist countries even the same notions have different contents. For example, in Bulgaria almost the total agricultural production is unified in large, so-called agro-industrial complexes by amalgamation of cooperative and state farms which, however, do not comprise industrial units. This is followed, as a second step, by the gradual realization of vertical integration in the framework of which industrial and agricultural activities are combined. (These are called industrial-agrarian unions.)

In Hungary the oldest, tested form of relations between agricultural farms and food industrial as well as trading enterprises is the system of *production and delivery contracts*. These contractual relationships are to be upheld and even further developed also in the future. For example, services could be expanded, risk-taking should be shared more rationally and it must be achieved that agricultural products produced on contractual basis should be taken over in time, because not doing so causes economic damages. Security of production is increased if contracts are concluded for longer periods. These contractual relations may be the starting points for closer forms of integration. This could be achieved if e.g. a joint organization were established with decision-making power whose task would be to coordinate the development of the production and processing of raw

materials, to decide on debated questions between cooperating enterprises and to check on the fulfilment of commitments included in contracts.

Closer and more efficient forms of cooperation are the various *associations*. Their number is over 500 at present. Even new productive capacities develop in the framework of such associations.

In Hungary, the following three basic types of associations can be distinguished:

1. The loosest form of cooperation is the *simple association*, which is not an independent legal entity. The funds of the association are raised by the cooperating farms which share in returns according to their contribution. In most cases also the production systems can be regarded as simple associations.

2. The *joint venture* is a legal entity acting with the participation of the founding (joining) farms.

3. The *joint enterprise* is a more developed form of association working as an independent legal entity conforming to the enterprise system of the national economy. Joint enterprises as legal entities dispose of own means of production, they have a property, while simple associations render various services for the member-farms, but do not dispose of own means of production.

Generally, only agricultural cooperative farms participate in associations at present. But there are also such ones which are associations of state farms and cooperative farms, where even non-agricultural food industrial and trading enterprises as well as general consumers' and sales cooperatives participate. It is desirable that these associations be joined by more and more state (food industrial, trading) enterprises, general consumers' and sales cooperatives and even industrial cooperatives as well.

Further development and increase of the number of associations are also justified, because by amalgamation of a part of the property of the participating state farms, cooperative farms, state industrial and trading enterprises as well as consumers' and sales cooperatives such economic tasks can be solved which would otherwise exceed the possibilities of individual farms and enterprises. The number of associations with independent legal entity, however, decreases at present, owing to the lack of economic conditions as well as to unsatisfactory legal and economic regulation. Therefore, "revision of the law on association is an urgent task, already included in the legislation plan of the government. This is justified also by national economic interests, attached to the development of economic cooperation between production units. From this point of view a further approximation of the regulatory systems of cooperative farms, state farms and food industrial enterprises will be one of the next tasks involving several ministries." [5]

From among the associations special attention should be paid to *industry-like production systems* claiming increasing interest also at international level. Their establishment was initiated by advanced state farms. Production systems appeared in Hungarian agriculture in poultry meat and egg production in the 1960s and a bit later in pork production. From the early 1970s on industry-like production systems have been spreading also in plant cultivation; in 1975 almost half of large-scale agricultural plants joined to various production systems. Production systems are specific forms of horizontal integration where a rational division of labour has developed between the system centre as well as the member-enterprises and factories, respectively. The essence of the system is that in every phase of the production process, organized on industrial basis, up-to-date production

factors are applied in a complex way and developed in harmony. The scientifically founded technologies developed in this way will be introduced in the member-farms. An essential criterion of industry-like production systems is a considerable increase of yields. According to Hungarian experiences the complex systems of animal husbandry and plant growing based on modern technology and genetics are efficient means of developing an industrialized agriculture. This activity should be continued also in the decades to come drawing, of course, the lessons from the progress achieved until now in order to further improve the efficiency of production systems. Without striving for completeness let us enumerate some of the tasks:

1. In industry-like production systems large volumes of agricultural products are produced. This allows and also necessitates that the production systems should have a greater part in the industrial processing of products. Thus, for example, in maize growing systems it is expedient to establish also fodder mixing plants beside conveyors and silos. This is especially justified if maize is grown for own use. It may be expedient to process also other agricultural products in the system. But the farms participating in the system often cannot fulfil this task, thus the cooperation of various enterprises producing, processing and selling raw materials, respectively, is required. It should be considered that systems producing large volumes of agricultural products be given existing industrial processing plants, at least as an experiment.

2. In production systems yields are very different at present. There are also such farms where production increased only to a small extent after having joined the system. One of the reasons is that farms do not always follow the technological prescriptions, but it may occur as well that the potentialities of the individual farms were not properly taken into consideration when adapting the technology of production and giving professional advice. Adaptation of production technology has to be carried out in such a way that the system should be built into the activities of member-farms. The solution of related organizational questions is all the more justified, because a considerable part of farms participating in production systems are not capable to solve them by themselves as yet. Therefore, greater attention should be paid to the faster spreading of advanced organizational principles and solutions, since this is at least as important as is technology and moreover, also much cheaper.

3. There are problems to be solved with regard to the *interests* of system centres and those of member-enterprises, too. In a part of the systems financial interest is attached to surplus yield even at present. The member-farms, however, are interested in the development of profits and the increase of average yields is expedient for them only until it is in harmony with their profit motivation. On the other hand, the system centre is interested in the maximization of average yield which is not necessarily concomitant with the increase of profits because of the not always favourable value relations between additional expenditure and additional yield. Therefore, interestedness must be developed in such a direction that the system centre should be also interested in the development of farm incomes.

4. In some problematic branches of agriculture — e.g. vegetable —, fruit- and vine growing — greater attention should be paid to the establishment of well-founded industry-like production systems.

5. Finally, I should like to mention a view which is, in my opinion, not correct. Though it is true that in Hungary the main form of the industrialization of agriculture is the successful spreading of industry-like production systems, this cannot be regarded as the only form whose introduction is obligatory for each farm and branch. Novelty should not be applied for its own sake, nor because it is "modern". The traditionally tested, perhaps less "modern", but more economical production systems requiring less investment, which are not in contradiction with the existing characteristics of farming are to be kept for a longer time, yet. Namely, the conditions of the industrialization of agriculture differ by farms and only such development can be successful which is adapted to the concrete circumstances.

Agro-industrial unions represent a higher level of agro-industrial integration. In some socialist countries they are called *agro-industrial complexes*. The latter is first of all a national economic category while the former a notion of the micro-level. Agro-industrial unions mean, namely, vertical relations of enterprises, but also inter-enterprise relations. Unions of such type have appeared in recent years. They are wide-spread first of all in some republics of the Soviet Union (Moldavia, Ukraine). In Hungary four agro-industrial unions have been established with experimental character, where the participating industrial plants and agricultural enterprises keep their independence.

In the economic literature of socialist countries discussions are going on about the essence, development and internal contents of agro-industrial unions and complexes. An opinion is rather widespread according to which agro-industrial complexes consist of three main components, namely:

1. industrial branches manufacturing means of production for agriculture and a wide network of producing and sales enterprises established by these industries for the material-technical supply of agriculture;

2. agriculture and

3. the food industry as well as trade in food.

As far as the interpretation of the agro-industrial complex at macro-level is concerned, there is no doubt that means of production are delivered by industry in growing quantities to the agriculture and — as has already been mentioned — food industry processes an ever increasing part of agricultural products. Consequently, the relationship between these branches is necessarily strengthening. These relations can be observed also in the input-output table and, therefore, it is really justified to assert a complex approach in planning and development activity. This means, among others, that in the socialist countries industrial branches manufacturing means of production for agriculture should be more rapidly developed on the basis of the international division of labour. The structure of industry should be modified in such a way that all needs resulting from the industrialization of agriculture could be met. Similarly, much has to be done for the development of the food industry, too, in order to reconcile the capacities of raw material production and processing. From this it does not follow, however, that the control and management of the branches mentioned should be taken over by some kind of a super-ministry. Although the block mentioned can be really found in the input-output table, there is no objective measure by means of which it could be unambiguously stated what belongs to the agro-industrial complex. This is very well shown also by the fact that almost every author draws the limits of the agro-industrial complex elsewhere.

Accordingly, complexes in a narrower and a wider sense are mentioned, but their contents is not at all unambiguous.

A similarly obscure situation would arise if chemical, building and oil industrial complexes were established on the analogy of agro-industrial complexes since these are at least as justified as are the agro-industrial complexes. What is more, these industrial complexes do indeed exist in the input-output table. Therefore, a complex approach is necessary also here in the course of planning and development.

The interpretation of agro-industrial unions and complexes at micro level can also be debated from several points of view. Thus for example, it could hardly be accepted that the agricultural machine-building industry should be amalgamated with raw material production and processing at the enterprise level. Despite the fact that agriculture utilizes more and more machines, development of the agricultural machine-building industry as well as the technical standards of machines are determined by the situation of machine-building as a whole. Agricultural machine-building has to cooperate with the other branches of engineering. In some cases it is, of course, imaginable that also enterprises manufacturing means of production participate in the agro-industrial unions. Clarification of this question needs, in my opinion, further researches. Taken as a whole, however, the strengthening of relations between agriculture and the enterprises manufacturing means of production for it — which is necessary indeed — should be sought elsewhere in my view. In case of industry-like production systems contractual relations can be found in Hungary between agricultural farms and enterprises manufacturing means of production also at present. Thus, for example, in the framework of an industry-like maize growing system (Nagyigmánd) various experiments are carried out with agricultural machines and a close cooperation has been established with machine producers and development institutes. This cooperation is successful and the machine producers make good use of the experiences gained by the maize growing system. Such relations are to be strengthened and widened in the future, too, by means of contracts based on mutual advantages to the partners. This is, after all, also in the interest of the manufacturing enterprise.

Amalgamation of food trading enterprises with agro-industrial unions seems to be problematic, too. The problem results from the opposite development trend of farms and trading enterprises, respectively. Agricultural units are getting more and more specialized, while in food trade universal stores (supermarkets) are spreading at the expense of specialized shops. They purchase the goods for sale from the food industry. Another problem is caused by the circumstance that these universal stores sell not only products of the food industry, but also other consumer goods. Of course, agro-industrial unions may establish their own network of shops, but these are specialized shops where unions sell their own products. When establishing agro-industrial unions it would not be expedient to try to involve trading enterprises in masses. Also the relations between universal stores and agro-industrial unions, have to be based first of all on contracts. That is one of the reasons why we have emphasized that the system of contracts would be maintained also in the future.

If the above is valid for food trade, it holds even more for those branches which supply not only the agro-industrial unions (e.g. energy production, transportation, credit supply, etc.). They, too, have contacts with agriculture, nevertheless their enterprises cannot be amalgamated with agricultural ones.

After all, we can come to the conclusion that in agro-industrial unions state farms and agricultural cooperatives producing raw materials, food trading enterprises, eventually consumers' and sales cooperatives, scientific research-institutes and, if necessary, also enterprises manufacturing certain means of production for agriculture may participate. This definition of agro-industrial unions does not exclude, of course, that in their framework also machine repairing, maintenance, transport and trade activities are performed. I only wish to emphasize that the definition of agro-industrial union which is rather wide-spread at present cannot be approved. In my opinion, determination of the contents of agro-industrial union needs further discussions.

Agro-industrial unions further the efficiency of food production, therefore they are of great practical importance. Their spreading may be only gradual for both objective and subjective conditions. At present the primary task is to better utilize the existing and tested forms of cooperation as well as to study and carefully analyze the experiences of agro-industrial unions functioning in Hungary and in other socialist countries. Their development and the rate of their spreading should be decided on this basis. I think it is justified in the long run to maintain the *variety* of integration, because this is advantageous from the economic point of view.

Agro-industrial integration, the union of and cooperation between enterprises of different form of ownership, respectively, promote also the further development of socialist production and ownership relations. Economics still owes us the examination of the ownership relations of these forms. Even without striving for completeness it can be stated, however, that in associations, joint enterprises and especially in *cooperative and mixed state enterprises* established in Hungary a transformation and development of ownership relations can be observed. Joint enterprises are owners of the means of production and this property is separated from that of the member-farms. However, the extent of separation is smaller than that between state farms and co-operatives, since the member-enterprises are *part-owners* of the joint enterprises and take part in their management indirectly, through their representatives. In case if only co-operatives participate in the associations, this hardly influences ownership relations, although these associations are significant from the economic point of view.

More important changes are brought about in socialist ownership relations by the agro-industrial unions if they include state and cooperative enterprises as well. This mixed ownership is already nearer in its nature to a uniform public ownership. In mixed ownership the socialization of labour and production is raised to a higher level. Enterprises in different ownership participating in agro-industrial integration spend a part of the surplus product on the expansion of the reproduction process of the joint undertaking, and the joint enterprise expanding in such a way will serve the increase of the welfare of each participant in the same way. On the basis of the high concentration of property also cooperation and planned management among the member-enterprises can be realized at a higher level. Agro-industrial unions enable a more consequent realization of distribution according to work. After all, agro-industrial unions promote the approximation of the living conditions and consciousness of the working class and the co-operative peasantry, respectively, i.e. they tend towards the elimination of differences between the two friendly classes. This process is furthered also by the circumstance that economic separation of the members of the union decreases (eventually even ceases) and the harmony of interests is better enforced as well.

To sum up what has been said in the foregoing, it can be stated even on the basis of this rather thesis-like paper that the diversified process of agro-industrial integration is an effective factor of our socio-economic development. However, there are many tasks still to be solved in the forthcoming period, although the first steps have already been taken both in theory and in practice. What is more, I dare say that practice has been ahead of theory in several respects, and, therefore, theory has much to make up for. The elaboration of these questions requires extensive and responsible efforts on the part of the scientists engaged in economics. Success may be complete only if researches on the subject will be organized in an interdisciplinary manner.

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АГРАРНО-ПРОМЫШЛЕННАЯ ИНТЕГРАЦИЯ

А. ШИПОШ

Аграрно-промышленная интеграция представляет собой общедействительное явление нашей эпохи, наблюдаемое как в капиталистических, так и в социалистических странах. Опыт социалистических стран показывает, что с продвижением социалистического общества вперед исследование аграрно-промышленной интеграции становится все более важной задачей как теоретически, так и практически. Ибо аграрно-промышленная интеграция – это не просто экономический процесс. Ее социально-экономическое значение очень велико, так как она способствует усовершенствованию социалистических отношений производства и собственности; сближению промышленного и сельскохозяйственного труда, положения рабочего класса и крестьянства; преодолению существенных различий между городом и деревней.

Условия социально-экономического сближения, сплетения сельскохозяйственного и промышленного производства созрели и созревают в результате относительно длительного исторического развития. Одним из фундаментальных факторов этого процесса является качественное изменение производительных сил. В результате протекающей в сельском хозяйстве научно-технической революции оно из трудоемкой отрасли превратилось в капиталоемкую. Техническое развитие в силу объективной необходимости приносит с собой углубление специализации, разделение труда, а вследствие этого – и потребность в производственной кооперации и комбинации.

Углубление связи между сельским хозяйством и отраслями, предшествующими ему или последующими за ним, требует особенно тщательной координации деятельности различных вертикалей производства продовольственных товаров. Из-за технологических взаимосвязей между отдельными вертикалями помимо координации рыночного сбыта необходимой становится и производственно-техническая координация. Эта объективная необходимость

на определенном этапе развития характерна как для социалистических, так и для капиталистических стран.

Для социалистических стран понадобилось более или менее долгое время, чтобы опознать объективные преимущества, кроющиеся в аграрно-промышленной интеграции, и приступить к сознательным действиям. В социалистических странах складывались и складываются различные формы связи между промышленностью и сельским хозяйством. В развертывании аграрно-промышленной интеграции в ряде стран наблюдается определенная постепенность, то есть развитие движется от формы менее тесного сотрудничества к более развитым формам объединения, интеграции.

В Венгрии наиболее старой и оправдавшей себя формой связи между сельскохозяйственными предприятиями и предприятиями пищевкусовой промышленности, а также внешне-торговыми организациями является система контрактов по производству и поставке товаров.

Более тесными и эффективными формами сотрудничества являются различные объединения. Наименее тесная форма сотрудничества — простая ассоциация, не являющаяся самостоятельным юридическим лицом. Более развитой формой объединения является совместное предприятие, действующее в соответствии с народнохозяйственным порядком деятельности предприятий как самостоятельное юридическое лицо.

Более высокую степень аграрно-промышленной интеграции означают аграрно-промышленные объединения. Автор анализирует, как сложились эти формы, каково их содержание, и какое действие оказывают они на социалистические отношения собственности.



T. ERDŐS

PRICE EXPLOSION AND ECONOMIC CRISIS

The author proves that the 1974–75 crisis cannot be classified as a periodic economic crisis and that it was most closely related to the world market price explosion in 1974. Similarly, he relates the particular features of this crisis – disturbances in the balance of current payments, accelerated inflation precisely at the time of the crisis etc. – to the price explosion. He emphasizes that the characteristics of the 1974–75 crisis seem curious only as long as we attempt to analyze them by relying on the scheme of the classical periodic economic crises.

The world economic crisis that began in the first quarter of 1974 – and proved to be the longest and worst one since World War II – has given and probably will go on giving plenty to think about to Marxist as well as non-Marxist economists. This is because this crisis had some unusual characteristics as compared with earlier crises and especially with those before World War II. These characteristics are particularly conspicuous in a number of West European countries and in Japan. It is not by chance that economic literature calls attention to the specific features of the 1974–75 crisis. And in Marxist literature this crisis is often described as one having specific features in comparison with classical periodic economic crises. What is more, as if it were a periodic crisis which had, due to several factors, other properties than earlier periodic economic crises. This approach practically suggests that the crisis starting in 1974 originated in the reproduction features of fixed capitals and in the cyclical fluctuations of fixed capital investments, and was further marked by events taking place meanwhile in capitalist world economy, such as the price explosion.

The following are most often mentioned as characteristic properties of the crisis: 1. the crisis took place in the midst of a strong inflationary price rise; 2. it was intertwined with the balance-of-payments crisis of numerous advanced capitalist countries; 3. it was introduced by a crisis that had already evolved in the international financial system; 4. it was intertwined with raw material- and particularly with energy crisis; 5. in the crisis period the nominal official bank interest rate was high in most countries.

A periodic economic crisis?

It is my conviction that an understanding of the nature and process of the 1974–75 crisis will be greatly promoted if particular attention is turned on the following two questions: 1. Economic crises may be of non-cyclical character, not based on the reproduction features of fixed capitals, and therefore, they cannot be examined in the customary way. 2. The phenomena usually mentioned as particularities of the latest crisis played an important role also in the evolvement and process of the crisis itself. We shall be more successful if we analyze the role of these factors in the crisis and do not rest

content with saying that they were special characteristics of the crisis. In this case, as always, the important thing is to analyze the interrelations. A thorough analysis will help us also in better understanding the nature of the crisis: in reaching the statement that the 1974–75 crisis cannot be listed among the periodic economic crises i.e. it has nothing to do with the classical reproduction cycle.

Periodic economic crises are based on fluctuating investments and, with these, on periodic fluctuations in the rate of the profit. In this case the crisis is accompanied by a fall in investments and a reduction of the rate of investment, while the upswing is concomitant with a fast rise in the volume and rate of investments. The rise in the rate of investment i.e. the growth of investment much in advance of production growth must sooner or later stop, what is more, the rate of investment will have to fall again, which prepares a new crisis. In this mechanism crisis is the cause of fluctuating investments and fluctuating investments are the cause of a new crisis.

The problem is that an economic crisis can develop without this, too, e.g. as a consequence of sudden and important changes in world market price proportions i.e. when a price explosion occurs on the world market. (But in such cases we do not speak about a classical periodic economic crisis.) The relationship between price explosion and economic crisis is found through the balance of payments.

The most important part of the balance of payments is the current account balance, the dominant part of which is the import and export of commodities and services. (In the following the current account balance will mean mainly exports and imports of commodities and services.) Long-range stabilization of the current account balance is an important objective, or, if it is unexpectedly and gravely disturbed —because the amount of expenditure items suddenly rises above that of receipts — it will be necessary to reduce the deficit as soon as possible and as much as possible. There is a very close relationship between the state of the current account balance and world market price proportions. If the current account balance of a country is stable, it is so with given world market price proportions. If there is a sudden and drastic change in world market price proportions, the current account balance of the country in question will be either highly active or highly passive. (It is an exception when the exports and imports of a country in goods whose price level has risen are of approximately equal proportions.) A highly passive balance is usually followed by a considerable reduction of the volume of imports, which results in declining home production. If the balance of payments positions of many countries deteriorate simultaneously, many countries will reduce their imports which is *ipso facto* concomitant with the reduction of their exports. This is because it is impossible to export the same volumes if imports of the partner are reduced. The reduced export volume makes it even clearer that production must fall since, particularly in our age, the external market constitutes an ever increasing part of the total market.

Of course, investments fall also if production is reduced because of a decline in foreign trade turnover. What is more, the fall of investments may be of large proportions also in such cases. Within a country, therefore, the picture may be similar to a classical periodic crisis: production is reduced and investments are reduced, as if the crisis were covered also this time by the reproduction properties of fixed capitals. But: though the classical crisis is accompanied by an important decline in imports and exports, it is not preceded and not accompanied by a gravely disturbed current account balance or foreign trade

balance as observable in many countries, i.e. by a grave deficit in the current account balance and, first of all, it is not concomitant with a world market price explosion. Therefore, if a price explosion occurs directly preceding a crisis or simultaneously with it and, parallel with it, while the balance of payments position considerably deteriorates in a number of economically important countries, there is a weighty reason to assume that the price explosion plays at least an important role in the outbreak of the crisis. It follows that it will bring hardly any satisfactory results to analyze the crisis solely by using the scheme corresponding to the classical periodic crisis.

Troubles in international economic relations

The 1974 price explosion hit hardest the European countries and Japan among advanced capitalist countries, and I think that the relations discussed above are valid mainly in their regard. The price explosion was manifest in the drastic price rise of certain raw materials, first of all of crude oil. It is well known that European capitalist countries and Japan are oil importers and countries exporting industrial finished goods. (Japan imports also most of her raw materials.) In a few European capitalist countries and in Japan the terms of trade developed according to the following, on a 1972 basis:

Table 1
Terms of trade in 1972-75

	1972	1973	1974	1975
Japan	100	96.4	74.8	69.9
Italy	100	91.2	74.6	79.6
France	100	102.5	88.0	95.2
England	100	89.4	75.4	82.6

Source: Computed on basis of International Financial Statistics, 1976,
October data of the International Monetary Fund.

That is, deterioration in the terms of trade is considerable. In the same countries and in the same years the balance of exports and imports of goods and services developed as follows:

Table 2
Balance of goods and services (million dollars)

	1972	1973	1974	1975
Japan	7088	178	-4405	-326
Italy	2485	-1968	-7302	+233
France	1936	1349	-3410	2836
England	1017	-929	-7480	-2862

Source: See Table 1

Deterioration of the balance is very strong. In Japan the deterioration of 1974 is \$11.5 thousand million in comparison with 1972, in England it is \$8.5 thousand million which is, considering the economic power of England, a more important amount than the 11.5 thousand million for Japan. From the view-point of the balance the worst year is 1974. The fall of production followed mainly in 1974 and 1975, i.e. after the price explosion. Together with that measures had to be taken with a view to stabilizing the balance of payments and a forced reduction of imports had to take place. In Japan production began to fall considerably in the third quarter of 1974 and a fast decline of imports started at the same time. In Italy and France a considerable fall of industrial production began in the fourth quarter of 1974 and imports began to decline practically at the same time and even prior to it. The situation was similar in England, where the real crisis year was 1975. That is, the crisis followed the high deficit in the balance of payments everywhere.

The preceding explanations do not entirely hold for each West European country. In the first place West Germany must be mentioned. It is true that the terms of trade deteriorated there, too, though to a smaller extent than in other countries under examination (the indicator of terms of trade in 1974 was 91 on a 1972 basis). The deterioration in the terms of trade, however, was not followed by a passive balance of exports and imports of goods and services. What is more, the balance that had been active before, even rose in 1974, and not slightly: from 10.3 thousand million \$ to 16.1 thousand million \$. This phenomenon is explained, beside a relatively less grave deterioration in the terms of trade by the competitiveness of West German products in up-to-date-ness and price, by the flexible adjustment of West German industry. Thus the fall in West German industrial production cannot be explained by an unfavourable balance-of-payments position. Yet the fast rise in prices of crude oil and certain raw materials influenced the development of imports here, too. The volume of imports which had been 129.2 per cent in 1973 over 1970 fell to 127.4 in 1974, as opposed to the earlier 9–10 per cent yearly increase; and exports fell from 149.9 per cent in 1974 (1970:100) to 134.3 per cent in 1975. That is, the reduction of exports amounted to 10 per cent in 1975, while earlier there was a yearly increase of 10–11 per cent. Well, in 1974 the fall in West German industrial production was still hardly noticeable, while significant fall followed in 1975. This cannot be otherwise in a country whose export ratio is above 25 per cent and whose industry is so much export-oriented. Production had to fall in West Germany, because imports fell considerably in most partner countries. The Federal Republic of Germany got involved in the world economic crisis not because of her own balance-of-payments disturbances but because of world-wide exporting difficulties following the disturbed balance of payments of other countries. The example of the FRG shows clearly, how close the mutual economic dependence is among countries of the capitalist world. The disturbances of international economic relations affect some countries in this way, others in another way, but they are by all means effective.

Thus, the crisis was in fact characterized by gravely disturbed balances of payments on a world scale. I think, however, that we must formulate things much more definitely. In many countries we find a direct causal relationship. Disturbances in the balances of payments played a role in the outbreak of the crisis: they caused the crisis. We are faced here with the best example of a crisis of non-cyclical character. It has been proved in practice that not only classical periodic economic crises can develop, but grave crises may

be caused also by troubles in international economic relations. In other world: economic equilibrium or disequilibrium is a function not only of internal but to a large extent also of external economic and political factors.

The acceleration of inflation

It is insufficient to mention as a characteristic feature that the crisis was accompanied by a strong inflationary rise in prices and that this is an excellent example of stagflation. Much more is involved.

First of all a more exact formulation is needed. During the crisis inflation was not only fast: in the initial period it accelerated and became a two-digit one. In the recession periods of post-war years an inflationary rise in prices occurred several times. But the rise did not accelerate in the course of these earlier recessions. On the other side, during this last crisis there was no stagflation (this notion is related rather to such economic state in which production stagnates or hardly grows and there is inflation at the same time). In this case the acceleration of inflation came about during the evolution of the crisis and the fall of production. That is really a new phenomenon, entirely unusual not only in the case of periodic over-production crises but also in that of recessions following the Second World War. Yet the real problem lies in that the acceleration of inflation was an organic part of the crisis process. While the nature of the classic periodical economic crisis implies a fall in prices, that of the present crisis implies — at least in the first period — a rise in prices, and even an accelerating one.

Inflationary rise in prices existed already before the latest crisis, and the rate of inflation had even been rising in quite a few countries. However, it is conspicuous that the peak values of the rate of inflation appeared in most countries in 1974, and in a few countries such as England, Ireland and Finland earlier or later in 1975. The following question cannot be circumvented: could the crisis in any way cause acceleration of the inflation? This may sound absurd, but the answer is yes: the crisis played a role in accelerating inflation.

As we have seen, the crisis was in close relationship with the price explosion, the deficit in the current account balance. Well, the inflationary price movement is also related to the price explosion. Our starting point was exactly that the indicator of the terms of trade was rapidly falling in advanced capitalist countries and that import prices rose steeply mainly because of the fivefold increase of crude oil prices, which led to disturbances in the balance of payments. But exactly for that reason also the rise of the domestic price level had to accelerate. I see the concrete reasons for acceleration in the following.

1. The higher prices of crude oil and raw material are built into the production cost of almost every commodity, if in no other way, then through the rise in energy prices. Enterprises try to compensate higher production costs by raising prices, since they endeavour to achieve continuously a not diminishing share of profit.

2. Deficit of the current account balance can be eliminated practically in two ways: by restricting imports and increasing exports. If exports cannot be increased in any way, it is a fundamental requirement that imports should be reduced faster than exports. This

means that the volume index of exports must exceed that of imports. In the case of exports with more slowly rising prices, imports with fast rising prices must be paid for by exporting comparatively more. Accordingly, in advanced capitalist countries the very interesting case occurred that in most of them the value of imports was growing much faster than the value of export, yet, at the same time, widely open scissors developed between the export and import volume index of import. Of course, scissors often develop, since whatever date is chosen for basis, setting out from there either exports or imports will grow faster. Yet, generally it is not real scissors what we have since exports and imports often go through changes of rates and because there is usually no considerable difference in rate between them. After the price explosion, however, in the majority of countries under investigation a conspicuous change took place also in this respect. (See Table 3)

Each country had a larger export volume in 1975 than in 1973, but import volumes were smaller in each, except the FRG. In Japan and Italy the gap between the volume indices is particularly large. The following role is played by this process in the acceleration of the inflationary price rise: apart from export and import prices, foreign trade turnover does not influence the domestic price level if exports and imports are balanced. A considerable excess of exports is, however, a price raising factor, since wages are paid and purchasing power develops also in the production of exported goods. This is not balanced by imports, so that through the excess of exports a net outflow of goods takes place. Thus the mass of products facing purchasing power is comparatively reduced within the country, and this results in a rise of the general price level. The more the export volume index exceeds the import volume index — compared with some basic year — the larger, *ceteris paribus*, the price raising effect of foreign trade turnover will be, — compared again with the basic year. Accordingly, the price explosion in the economies of advanced capitalist countries raised prices not only because production costs increased owing to rising raw material- and energy prices, but also by comparatively reducing the

Table 3
Volume indices of exports and imports

		1973	1974	1975
Japan:	export	100	117.1	118.1
	import	100	98.7	86.2
Italy:	export	100	107.4	109.8
	import	100	94.5	83.8
France:	export	100	109.5	105.0
	import	100	104.3	96.9
England:	export	100	105.0	102.5
	import	100	100.5	93.8
FRG:	export	100	111.9	100.3
	import	100	98.6	101.2

Source: Calculated on the basis of International Financial Statistics, 1976, October data of the International Monetary Fund.

commodity supply in relation to domestic purchasing power. The net outflow of goods promoted the rise in prices by all means. The natural basis of the whole process is that advanced capitalist countries supplied much more goods — means of production, consumer articles, in some cases arms — mainly to Arab oil producing countries for the same or a smaller amount of raw materials and first of all for oil. The result was a subsequent rise of the price level in advanced capitalist countries, and an acceleration of inflation.

3. The rise in prices causes a reduction of real wages if nominal (money) wages remain unchanged. Those living on wages and the trade-unions do not accept this and their answer to the rise in prices is a demand for higher wages. They usually attain the raising of nominal wages (which is, of course, no real wage-increase, if it is followed by an acceleration of the rise in prices). Prices had been continually rising even before the latest crisis and, with a view to compensation and over-compensation of the rise in prices, average nominal wages had been increasing. What is more, trade unions endeavoured to include even the expectable rise in prices into the wage-demands. Therefore, as well as for a few other reasons not examined here, an accelerating inflationary rise in prices was observable already before 1973 and 1974. To this was added the rise caused by the price explosion.

The acceleration of the wage-price spiral

In the final account, inflation had to accelerate considerably in 1974, partly because the price explosion itself would have resulted in quite an important additional rise in prices, even if the growth rate of nominal wages had remained at the level of the preceding year or years. Yet the growth rate of nominal wages had to accelerate also because of the price explosion. Now also the rise caused by the price explosion had to be compensated, for which those living on wages needed an even higher growth rate of wage-increase, which further accelerated inflation. We witnessed a highly intensive acceleration of the inflationary spiral, in which no small role was played by price explosion itself. Thus the price increasing effect of the latter is very complex. Its role does not lie solely in its direct cost-push effect, since it increased prices through influencing the export- and import volumes of advanced capitalist countries as well as through the acceleration of the wage-price spiral, too. It is very likely that the effect of the price explosion on the domestic price increase of advanced capitalist countries appears in enlarged form, i.e. the additional rise in prices must be bigger than what can be calculated from the direct cost effect of the price explosion. The inflationary effect of price explosion can hardly be understood without accounting for its role also in accelerating the growth of nominal wages. The very fast rise of nominal wages is reflected in the acceleration of wage costs per unit of output.

For lack of data on Italy let us quote data on average hourly wages in manufacturing. On a 1970 basis the indicator of nominal wages was 125.3 in 1972, 155.7 in 1973, 190.6 in 1974 and 241.4 in 1975 (!). Nobody can tell to what extent average hourly wages, and wage costs per unit of output would have risen in 1974–75 without the price explosion. It is, however, hardly disputable that the price explosion contributed much to the acceleration of the rise in nominal wages and the price level in each advanced capitalist country.

Table 4

*Changes in wage costs per unit of output 1970-75
(per cent)*

Country	1970	1972	1973	1974	1975
Japan*	100	118	122	157	192
England*	100	114	121	146	193
FRG*	100	112	119	133	143
France**	100	125.4	145.9	173.9	209.2

*Based on the data of manufacturing

**Based on the data of the engineering

Source: Main Economic Indicators, OECD 1976 November

A single price explosion has, by its nature, an intensive temporary inflationary effect. Other factors assumed as given, a single price explosion is followed by a sudden rise of the rate of inflation and then by its slowing down. The cost-push effect of the single price explosion is temporary, i.e. later the rate of price increase must slow down. Further, exports need not grow either at a continuously faster rate in comparison to imports, except the assumed case of a permanent deterioration in the terms of trade, which, however, does not occur in reality. Therefore the rate of inflation must slow down relative to the year in which the terms of trade deteriorated in fact. Of course, a later slow-down of the rate of inflation is promoted also by financial and wage policy measures restricting the rise in prices. The important thing is the following: in the case of a price explosion a considerable acceleration of the rate of inflation and its subsequent slowing down is a natural phenomenon. (Except for the case when the slowing down of the rate of inflation is hindered by the stepping in of other inflationary factors.)

As every crisis, also the one caused by a price explosion, and by grave disturbances of the balance of payments ceases and is of a transitory character. Overcoming of the crisis is promoted, among other things, if the volume index of exports exceeds that of imports, that is by the development of the scissors. Namely, because of the developing scissors the balance of goods services begins to get restored and extended reproduction may continue by setting out from new foundations. Improvement of the terms of trade i.e. structural transformation of foreign trade has a similar effect. It is not difficult to notice that, after the conditions for overcoming the crisis have been created, chances are good for a reduction of the rate of price increase. E.g. after the volume indicator of exports has risen above that of imports the balance of trade may be restored and thereafter: the growth rate of exports may be identical with that of imports. What is more, if the terms of trade improve, exports may even grow at a lower pace than imports. Exactly for this reason, the growth rate of domestic prices may fall considerably, since the increased rate of inflation compared with earlier times can be partly traced back to exports growing faster than imports. And with this we have arrived at an essential point.

Peculiar trends in prices and rates of interest

A characteristic feature of the classical periodic economic crisis is falling prices or at least a slowing down of the rate of increase of prices. The latter occurs if the economy has a structure on whose basis inflation becomes permanent. The end of the crisis, i.e., its overcoming is accompanied, in the classical case, by a rise in prices, or, in the case of permanent inflation, by an acceleration of the rate of inflation. As opposed to this, the crises caused by disturbed balance of payments, and by price explosion may be characterized exactly by the fact that at the beginning of the crisis prices will rise, or the inflationary price rise will accelerate, and the overcoming of the crisis may be marked by a slowing rate of the inflationary rise. Of course, at the time of overcoming the crisis the rate of price increase need not slow down by all means. If there is a crisis, it causes difficulties in any way; with a view to increasing production the monopoly-capitalist state may use its traditional tools also in this case. It may pursue a deficit budget policy – and it does – which may restrain and even stop the fall of the rate of inflation. Yet it may well be that everything happens contrary to the case of the classical economic crisis. In the initial period of the crisis the rate of inflation may suddenly rise, and at the time of overcoming the crisis it may slow down. And, in fact, something like that happened in many advanced capitalist countries after 1973. The rate of inflation culminated almost everywhere in 1974, and in a few countries in 1975, i.e. at a time when the crisis was already evolving. Thus we have one more reason to say that this crisis cannot be considered a classical periodic economic crisis. It becomes clear once more that it is not enough to refer to rising prices as a specific feature; it is more important to understand the actual role of price movement and, together with it, the nature of the crisis. The specific features will then appear as characteristics expressing the very nature and essence of the given crisis.

The situation is the same with the specific feature that official rates of interest were either not reduced at the beginning of the crisis, or were even rising, but they moved at a very high level everywhere. In any case, official discount rates were much more rigid after 1973, than at the time of earlier standstills and recessions. (in Japan, it remained at the peak level of 9 per cent even in the first quarter of 1975, in spite of the fact that industrial production had fallen by 19 per cent by that time in comparison with the production level of the fourth quarter of 1973. As opposed to this, in 1965 a minimum decline of 0.5 per cent in industrial production, i.e. a standstill in development, was enough for the official discount rate to be reduced from 6.57 per cent in the fourth quarter of 1964 to 5.48 per cent by the second quarter of 1965. Similar examples may be quoted from other capitalist countries.) While earlier the official rate of interest was adjusted flexibly to changes in economic situation, it moved at a high level everywhere in 1974. In 1974 it reached 13 per cent in France, 7 per cent in the FRG, 9 per cent in Italy, and 12.5 per cent in England, which counts, with the exception of England, as a peak level in comparison with previous times. (In England it reached 13 per cent in late 1973.)

In the initial period the crisis was necessarily characterized by high official interest rates, for the following reasons. 1. Inflation usually increases the nominal rate of interest. In case of a fast rise in prices the real rate of interest may be even negative, if the nominal

rate of interest is smaller than the annual rate of inflation. It is a matter of course that in the initial period of the crisis, appearing parallel with the acceleration of the rate of inflation, the high nominal rate of interest was either raised or not reduced. 2. The question has already been treated that in the 1974–75 crisis the gravely disturbed balances of payments played a decisive role in most advanced capitalist countries. Short-term capital imports may partly serve for the compensation of deficit of the current account balance. Their comparatively fast increase is promoted, however, exactly by the high rates of interest, therefore, the official rate of interest can be reduced rather when the current account balance begins to get restored. It is not mere coincidence that the reduction of discount rates followed mostly in 1975, when the deficit of the current account balance lessened considerably in most countries and when also the rate of inflation slackened in most places.

A few final remarks

Relying on the preceding explications it can be stated with some probability that the 1974–75 crisis was the consequence basically of the world market price explosion, and of gravely disturbed balances of payments. The specific features of the crisis appeared accordingly: such as the sudden rise of deficit in the current account balance in 1974, the soaring of the rate of inflation in the first year of the crisis, and its slowing down in a later phase of the crisis, the high level of the discount rate, i.e. its rise at the beginning and its gradual reduction later. These characteristics seem to be very strange if we start from the natural course of the classical crisis, yet they seem quite clear if we break away from the pattern of the classical crisis and consider the crisis practically as a direct consequence of the price explosion and the grave deficit of the balances of payments, as well as of the explosion of the extremely high tensions characterising the capitalist world economy.

It is indispensable to make the following comments on the preceding:

1. What is said in this article can be related to the United States of America but to a limited extent. It is true that the terms of trade deteriorated also for the U.S., and that imports fell considerably, but American exports diminished only to a small extent. This is explained by the fact that price explosion affected the U.S. economy to a lesser extent than the European and Japanese economies, partly because the U.S.A. is a big oil producing country and because the foreign trade sensitivity of the U.S.A. is much lower than that of Western Europe and Japan. It is very interesting that in 1974 the current account balance of the U.S.A. was active and in 1975 surplus rose to the huge amount of \$17.3 thousand million (in 1972 the current account balance was passive by \$5.5 thousand million.) Exports of the U.S. grew considerably also in 1974 – the growth of the export volume reached 9 per cent which was related to the fact that the competitiveness of American goods increased in comparison with Japanese and West European goods because of the price explosion. The export volume fell only in 1975, and by hardly 3 per cent because of the decline in world trade. To this extent the price explosion had obviously a role also in the recession of American production. Yet the American economic crisis cannot be connected with a balance of payments crisis, since the American balance remained active throughout the crisis. It is quite possible that Ferenc

Molnár is right in tracing back the American economic crisis, among other things, to the diminishing share of state purchases. [1] Of course, the price explosion did play some role in the American crisis, e.g. in a way that demand for cars fell because of fast rising costs of petrol. It is very difficult to say what would have happened in the U.S. without the economic and balance-of-payments crisis of other capitalist countries. The question is to be investigated separately — it has not been solved by far as yet — how the American crisis and that outside the U.S. affected each other, what the reason for their concurrence is and how the synchronisation of the crisis is to be evaluated.

2. Processes characteristic of crises of other nature also take place in the crisis originating in the disturbed balances of payments and in price explosion. Thus e.g. investments fall in every crisis, independently of the immediate cause. They fell also in 1974–75. As a consequence, this crisis also prepares a new growth in the investment rate, which is characteristic of the classical cyclical crisis. Furthermore, in the crisis it is always a natural effort to increase government expenditures, in today's capitalism a budget deficit always appears in the crisis. It thus happened also this time in every advanced capitalist country: in England the budget deficit amounted to £ 8.4 thousand million, in Italy to Lit 16.5 billion, that is 8 and 14 per cent, resp., of the English and Italian gross national products. Such huge deficit releases a strong inflationary effect, therefore, it is no wonder that the early fast rise of the rate of inflation will stop rather uncertainly, and, with production starting to rise inflation will accelerate once more, similarly to the case of cyclical crises.

3. The final cause of the 1974–75 crisis is, as of every economic crisis, in the contradictions of capitalism. Yet, what we are now facing is primarily the international manifestation of the contradictions. The problem lies in that in today's capitalist world economy the organization of the reproduction process — demanded by the forces of production that have become international — is unsatisfactory in consequence of economic and political discords developing between national economies for various reasons. It can be expected that these discords will lead to new conflicts and new economic shocks. To analyze the nature of economic crises lying on such foundations is today a much more important scientific task than to examine the regularities of classical economic crises.

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ВЗРЫВ ЦЕН И ЭКОНОМИЧЕСКИЙ КРИЗИС

Т. ЭРДЕШ

Автор показывает, что экономический кризис 1974–1975 годов нельзя причислить к числу периодических экономических кризисов, наоборот, этот кризис можно понять только в том случае, если его развертывание и особенности не будут анализироваться по привычному шаблону. Этот кризис по своему характеру был не циклическим, а представлял собой кризис мировой экономики, тесно связанный со взрывом цен на мировом рынке.

Свои выводы автор относит, в первую очередь, к кризису, имевшему место в Западной Европе и Японии. Он выявляет, какое влияние имел взрыв цен на текущий платежный баланс капиталистических стран Западной Европы и Японии и, далее, что в развертывании кризиса определенную роль играли и мероприятия, направленные на выравнивание нарушений платежных балансов. Особенности кризиса 1974–1975 годов рассматриваются в отрыве от схемы классического кризиса. Автор доказывает, что взрыв цен на мировом рынке по необходимости ускорил имевшийся инфляционный процесс. Инфляция ускорилась в силу того, что а) резко повысившиеся цены на сырье и, в первую очередь, на нефть привели к росту себестоимости почти всех товаров, который монополии стремились компенсировать посредством повышения цен; б) некоторые страны стремились ликвидировать дефицит баланса текущих платежей и за счет расширения экспорта при одновременном ограничении импорта. В результате внутреннее предложение товаров относительно уменьшилось, и это приводило к ускорению роста цен; в) из-за ускоряющегося роста цен рабочие и служащие стремились к еще большему повышению номинальной заработной платы — темпы роста номинальной заработной платы значительно повысились — и это послужило благоприятной почвой усиления спирали заработной платы — цен. Таким образом в нынешних условиях весьма понятно такое явление, когда под влиянием серьезного нарушения равновесия текущего платежного баланса разразился не только экономический кризис, но что этому кризису сопутствовало и ускорение темпов роста цен. Естественным явлением может считаться и то, что по завершению кризиса уменьшаются темпы инфляционного роста цен. В связи с тем, что развертыванию кризиса сопутствовало ускорение инфляции и в то же время в большинстве развитых капиталистических стран текущий платежный баланс был пассивным, при развертывании этого кризиса нельзя было снизить номинальные ставки процента, хотя они и стояли на довольно высоком уровне.

В заключение автор подчеркивает, что экономический кризис 1974–1975 гг. может быть понят лишь на основании взаимосвязей мировой экономики.

B. KÁDÁR

THE COMMODITY PATTERN OF EAST–WEST TRADE

In connection with the acceleration of the structural transformation of world economy the article attributes decisive importance to structural factors at the present development stage of East-West relations. The rigidity of the commodity pattern of East-West foreign trade relations lasting already for 25 years is connected partly with the discrepancy of development levels, systems of control and management as well as economic policy objectives, and partly with recent development trends of the world economy, thus the present commodity pattern reminds more and more of an intersectoral division of labour between developed market economies and developing countries. The speedy putting forth of more up-to-date forms of industrial division of labour urges on the prioritization of structural policy, the further development of management systems and market organization as well as on the elimination of barriers in international commercial policy and the international coordination of national structural policies, respectively.

The experience of recent years has shown that structural development has become a key issue of cooperation between East and West. The importance of the problem can be explained by the almost simultaneous appearance of a great number of factors. In the last decade rearrangement processes have taken place in the world economy following which one can already speak of a new stage of international economic relations and of the beginning of a new era in world economy. This new era in world economy whose effects can be felt in every sector of world trade, thus also in East-West relations, resulted, to a great extent, from an acceleration of structural transformation in particular countries.

Largely on the basis of own developmental factors, a part of European socialist countries reached a new, qualitatively higher stage of development by the end of the last decade, and the ensuring requirements of intensive growth are mostly of a structural nature.

Since a period of world economic development has recently come to an end where relatively more favourable foreign trade possibilities for socialist countries prevailed which, however, could not be regarded as lasting, the requirements arising in the new stage of economic growth caused lasting disequilibria in East-West foreign trade relations. It is hardly disputed these days that the disequilibrium of foreign trade is rather of a structural character, and not so much political or cyclical one, and that this offers perhaps the most serious obstacle in the way of the growth of East-West economic relations.

It is generally accepted that the development of economic cooperation between East and West is not merely an economic interest for the partner-countries, but also an important factor of peaceful coexistence. In the following I am going to examine the structural problems of East-West trade not so much from the point of view of assessing past trends, but rather from that of the future developments which are of great importance also from the point of view of international affairs and world economic development as such.

Structural impacts

Problems of the present commodity patterns of East-West trade reflect, of course, the impacts of various factors. The heritage of the historical development cannot be neglected in any of the phases of universal economic development. The European CMEA-countries — except for the GDR and Czechoslovakia — belonged to the group of economically underdeveloped or medium-developed countries, respectively, and this level of development was reflected also in their foreign economic relations. In 1950, within East-West relations 60 per cent of the exports of CMEA-countries covered unprocessed raw materials and foodstuffs, a ratio that was only slightly more favourable than the 85 per cent of the then underdeveloped countries, colonial and semi-colonial areas. The examples of countries at a higher level of development indicate what is more that historically developed particularities of the division of labour can be transformed only at a very slow rate.

It is also obvious that the development in the CMEA-countries in the last 25 years being very fast even by international standards, could nevertheless only partly eliminate the evolutionary drawbacks. They are still placed about middle on the international ranking list on the basis of the development level of their forces of production. Therefore, the structural characteristics of East-West foreign trade relations reflect those of foreign trade relations between economically developed and medium-developed countries.

Beside particularities resulting from the inheritance of historical evolution and the differences in development level, those following from the different functioning and overall management systems of the economies of countries with socialist planned economies and capitalist market economies, respectively, cannot be neglected, either. Western enterprises established under the circumstances of market competition could operate less efficiently and felt lost under the conditions of a planned economy, while the socialist ones accustomed to the atmosphere of central management and stability were not at home in conditions of market competition and cyclical fluctuations. Problems of cooperation resulting from the differences in the systems of control and management are relatively less important when the overwhelming part of mutual supplies involve raw materials, foodstuffs or industrial products for end use and the essence of economic relations is foreign trade.

The picture will change if — as a result of economic development and technological-structural transformation — economic cooperation grows out of the framework of simple commodities exchanges, and foreign trade becomes an element of a comprehensive system of cooperation in technology, science, financing and marketing, and investment goods as well as other technical products requiring more complicated forms of cooperation grow to prevail within the turnover of foreign trade. The higher development level of forces of production postulates, at the same time, also more up-to-date forms of the international division of labour and the development, manufacturing and sales of more advanced investment goods, but lately consumption goods as well require closer cooperation between the partners, occasionally even organizational links. Therefore, at a higher level of economic development, the identity or divergence of the systems of control and management influence the structural characteristics of cooperation to a much greater extent than in earlier periods.

The character of economic policy is also of structure-shaping effect. After the Second World War the western countries wanted to restrain imports from and the economic development of socialist countries by applying embargos for considerations connected with foreign policy and strategy. The exports of socialist countries were limited by the so-called customs escalation policy of western countries, by duties on individual products increasing parallel with the grade of processing, discriminative restrictions with reference to market disturbance and various administrative obstacles. The effect of structural restrictions resulting from political hostility was strengthened by the differing character of ideas on development strategy and foreign economies in western and socialist countries, respectively.

After the Second World War the developed market economies concentrated their economic efforts on strengthening the weakened bastions of capitalism, widening the international division of labour, increasing export-orientation as against the protectionism that had prevailed between the wars, and accordingly, on the removal of barriers to international economic relations and the development of regional or even world wide integrations. Partly in consequence of the extrapolation of experiences obtained in the restricted world economic relations between the wars and partly in response to the political embargo the CMEA-countries shaped their development strategy in a way that it should serve the realization of the widest possible internal or regional autarchy over nearly twenty years. Under such circumstances national economic plans did not further specialization according to the requirements and possibilities of a world market which was exposed to cyclical fluctuations and full of hostile political interests. This development conception has been modified only in the last decade, mainly under the influence of possibilities and requirements of economic development achieved by that time, as well as in the spreading spirit of *détente*.

Finally, the commodity pattern of East-West trade reflects also the consequences of different economic dimensions. The European socialist countries – except for the Soviet Union – are relatively small, but the major part of their “western” trade is realized with great powers of the world economy, as the USA, FRG, Japan, France and Great Britain. Resulting from the asymmetry of economic sizes East-West relations illustrate, to some extent, also the characteristics of the exchange of goods between small and big countries.

Structural development of East-West trade

The first signs of a new growth period of the world economy and of CMEA-countries appeared in the second half of the 1960s. In this way, it is expedient to analyze the development of the commodity patterns on the basis of changes between 1965 and 1975.

The most obvious feature of the structure of exports from the CMEA-countries to the West is relative stability. The proportion of processed goods within CMEA exports amounted to 40 per cent in 1950, to 34 per cent in 1965, to 40 per cent in 1970 and to 36 per cent in 1975, respectively, i.e. in the last quarter of a century more than three-fifths of the exports of CMEA-countries consisted of raw materials and foodstuffs.

The stability of major structural proportions can be explained partly by shifts in proportions during that time. The increase in exports of industrial goods between 1965

and 1975 undoubtedly disappears in the figures because of the rising relative prices of raw materials and especially of fuels. The development of Soviet exports at a more rapid rate than the average has the same statistical effect (the share of Soviet Union in CMEA-exports was 40 per cent in 1965 and already 50 per cent in 1975), since barely one fifth of Soviet exports are industrial products. However, the shifts in relative prices and the geographic structure of CMEA-exports, respectively, provide only a partial explanation, since the proportion of industrial goods in the imports of developed capitalist countries was 56 per cent both in 1965 and 1975 despite the price explosion and they began to establish an industrial division of labour with medium-developed countries at a rapid rate.

In the relatively more favourable period of development the exports of CMEA-countries increased first of all in the category of unprocessed goods and especially in that of fuels. The proportion of raw materials and energy in exports does not allow one to judge the development level of a given country (see USA or Canada). However, the previously underdeveloped CMEA-countries – except for the Soviet Union and, to a smaller extent, Poland – turned into structural importers of raw materials in the past ten years and their processing industry only then began to require the stimulating effect of entering into the international division of labour. Several socialist countries, what is more, show favourable potentialities by international standards, in agriculture in the first place even at present.

The slow growth of agricultural exports and the decrease of the previously high proportion of agricultural products are connected, to a considerable extent, with the agrarian protectionism of the Common Market and the development of the agrarian potential of the developed market economies. The decrease of the relative weight of agricultural export can be observed for meat and other animal products, and cereals as well as fruit and vegetables. Increasing domestic use restricted the increase of the export of agricultural and mining raw materials. Thus the major part of the exports of agriculture and the extractive industries from the CMEA-countries, more than two thirds of total exports, at present consist of fuel sources. The possibility of a further rapid increase in the export of fuel sources is, however, limited partly because of the difficulties of expanding production and partly because of the stabilization of the relative price level. The degree of dependence on energy sources of limited export dynamism is rather high even by international standards.

In this way, the future expansion of CMEA-exports and especially of the exports of smaller CMEA-countries depends on the increase of industrial exports. It is favourable that the share of machines and equipments representing the development level of the individual countries increased more than anything else in the ten years examined. From the point of view of international relations of demand and supply, however, it is increasingly disadvantageous that the exporters from CMEA-countries strengthened their positions primarily on the clothing and footwear markets. In 1975 nearly one fourth of their industrial exports consisted of metallurgical and about one tenth of chemical industry semi-finished goods. It is well known that the demand dynamics of such products is moderate and the market is highly sensitive to cyclical fluctuations, moreover, it is largely under the control of major monopolies. What is more, the future price level will be influenced with lasting effect by the growing exports of developing countries with lower costs.

Changes in the main proportions of the import structure show an increase of the share of industrial goods from 66.5 to 77.3 per cent. Therefore, the structure of imports from the West has been determined, both in the past and at present, first of all by the requirements of the technological and industrial development of the CMEA-countries. The results of efforts made in order to realize regional self-sufficiencies in agriculture and the extractive industries — except for cereals — are well reflected in the development of the import structure. As regards the engineering goods, the most important item in imports, the expansion in the manufacture of vehicles restrained the growth rate of imports. At the same time imports of non-electric machines serving production purposes rapidly increased and their proportion is very high by international standards.

With the sudden increase of machinery imports and the acceleration of technical modernization the proportion of semi-finished products, first of all those of metallurgy increased. The use of imported modern technologies can often be ensured only by importing specified semi-finished products connected with the technical character of the given equipment. At the same time, the increase in the import of semi-finished products reflects also certain internal particularities of the economic organization; the deficiencies of specialization within the industry can be mitigated in several cases by importing more semi-finished products. The decreasing tendency of the proportion of chemical products reflects first of all the building up of home production.

Comparative analysis of the commodity patterns

The commodity patterns of East-West trade show a different picture on the export and import sides. The main proportions of the export structure of CMEA-countries remain unchanged, and do not reflect properly either the tendency of structural transformation in world trade or the development level of CMEA-countries. For example, in total CMEA exports the proportion of machines is nearly four times the East-West trade average. In the exports of developed capitalist countries the proportion of machines is also nearly four times as high, and three times as high as a proportion of total world trade, than in the "western" export of CMEA-countries. On the other hand, the proportion of machines in the exports of developing countries increased from 1 to 5 per cent between 1965 and 1975. The figures for medium-industrialized capitalist countries are 7 and 18 per cent, i.e. the share of engineering goods in the Western exports of the CMEA-countries which increased from 5.6 to 9.1 per cent more and more grows to resemble values characteristic of less developed countries.

As against the export structures lagging behind CMEA-imports within East-West trade show relative structural overdevelopment. The proportion of machines is higher than in the total imports of the CMEA or even in world trade. Similarly, the share of chemical articles in imports is also much higher than that in total world trade (7 per cent) or the imports of the CMEA-countries (6 per cent) despite the decrease in proportion. The share of metallurgical products in imports is nearly double the world average. The high proportion of industrial goods in imports, exceeding the international average, can be explained by the relatively high degree of self-sufficiencies in agriculture and extractive industries in the CMEA-countries. It follows that any decrease of regional self-sufficiencies

in the extractive industries developed within the framework of cooperation among CMEA-countries also influences the commodity patterns of East-West relations and may narrow down the widening scope of industrial and technological imports.

The main structural proportions refer to the character of specialization in East-West trade. In the developed market economies the motive power of the division of labour is specialization within individual industries, while, at the same time, in the relations between developed capitalist countries and developing countries intersectoral specialization remains almost unchanged: the exchange of products of developed countries which are technologically up-to-date and meet higher standard requirements for raw materials, foodstuffs and simple labour-intensive industrial articles that satisfy lower standard requirements produced by the developing countries.

The commodity pattern of East-West relations tends to be similar to intersectoral specialization established between developed capitalist and developing countries. CMEA-exports consist mostly of raw materials, sources of energy as well as foodstuffs pay for imports of industrial goods. CMEA exports of industrial goods cover mainly consumer goods, while imports of industrial goods are mainly investment goods. Within the machinery trade the proportion of non-electric machinery in exports amounts to 4 per cent as against 24 per cent of imports. An examination of the structural gap between the commodity pattern of East-West trade and of world trade during the last 25 years would require a special statistical survey, but in the case of the more industrialized small socialist countries the relative proportion of intra-industrial specialization was higher before the Second World War than the present proportions in East-West trade.

The specialization is given an irregular character also by the circumstance that the overwhelming part of the export of CMEA-countries based on natural endowment (foodstuffs, raw materials, sources of energy, vegetable and animal oils as well as processed raw materials as products of the timber, paper and textile industries as well as of metallurgy amounted to more than three quarters of CMEA-exports to the West in 1975) consists of products that are more capital intensive than the average, as well as by the fact that the imports of CMEA countries consist mainly manufacture goods. As a consequence of the differing capital-intensity of exports and imports, in the foreign trade turnover of CMEA with developed market economies the Leontief-paradox appears in East-West trade. CMEA-countries at a medium level of development, which are short of capital, export financial resources, as a result of the irregular structure of their exports, to developed market economies which are structurally capital exporters. True, this phenomenon can be observed also in the case of underdeveloped or medium-developed capitalist countries that export capital-intensive products of the extractive industries, as well as other raw materials, but in these countries the extractive industries are usually the result of foreign capital investment. Therefore foreign trade largely ensures the returns of capital exported from developed capitalist countries. In case of the CMEA industries that produce with a higher than average capital intensity there is no question of such capital returns, therefore the export structure engages additional domestic resources of investment and influences the efficiency of investments at a national economic level. It may, moreover, result in disturbances of the growth cycle because of its irregular nature.

Recently the character of specialization has given rise to certain problems also owing to the fact that the intersectoral specialization between developed market economies and

Table 1
Export structure of CMEA-countries in the East-West trade
(in per cent)

	Export					
	European CMEA-countries			Soviet Union		
	1965	1970	1975	1965	1970	1975
Foodstuffs, livestock	20.2	16.4	9.5	5.1	5.1	1.7
Of this: meat, meat products	6.0	5.0	4.0	0.2	0.2	0.3
dairy-products, eggs, cereals	1.9	0.7	0.4	0.0	0.0	0.0
Fruit and vegetables	2.5	2.1	0.3	1.5	1.6	0.0
Beverages, tobacco	3.9	2.9	1.8	1.3	0.3	0.2
Raw materials	0.9	0.7	0.7	0.2	0.2	0.2
Of this: wood	24.9	21.4	15.6	36.7	32.8	23.2
paper, cellulose	14.3	11.3	7.2	21.1	18.6	11.0
textile fibres	0.6	0.5	0.2	0.9	0.7	0.3
basic material for fertilizers	2.4	1.6	2.4	4.4	2.5	4.4
ores	1.8	2.1	2.3	2.4	3.0	3.3
Fuel	2.4	3.6	2.0	4.2	5.8	3.2
Of this: coal	18.1	20.3	36.6	28.2	33.4	54.0
petroleum	6.5	7.1	10.1	7.4	6.9	6.3
Vegetable and animal oils and fats	10.7	12.9	24.8	18.7	25.8	44.2
Chemicals	1.3	1.5	1.7	1.9	1.6	1.8
Of this: basic chemicals	4.7	5.4	5.3	2.3	3.1	3.9
Manufactured goods	2.5	2.9	3.0	1.1	1.8	2.2
classified by materials	20.0	20.2	13.8	23.0	18.6	9.8
Of this: textiles	2.2	2.1	1.9	0.5	0.6	0.5
Iron, steel	6.0	7.1	3.8	7.0	3.8	1.3
non-ferrous metals	6.4	6.7	4.1	11.5	11.4	5.5
Engineering goods	5.0	7.5	8.6	1.9	3.6	4.4
Of this: non-electric machines	2.5	4.2	4.3	0.9	2.0	2.0
Transport equipment	1.7	1.9	2.6	0.8	1.2	1.9
Other processing industry products	4.3	5.8	7.6	0.5	0.7	0.7
From this: clothing	0.8	2.0	3.3	0.0	0.0	0.0
Others	0.5	0.9	0.7	0.9	0.9	0.5

Source: OECD Foreign Trade Statistics, B Series

developing countries is stimulated by the gradual transfer of certain industries or industrial activities to developing countries and by commercial policy preferences being granted to their products. For the specialist countries with a similar range of production and supply the strengthening competitiveness of countries enjoying the organizational and commercial policy advantages of transfer, and producing at lower cost levels, may cause increasingly serious sales problems.

In consequence of the present range of supply in industrial articles the exporters of CMEA countries compete not so much with the lagging-behind industries of developed capitalist countries — where the lower level of specific wages costs ensured some

Table 2
*Import structure of CMEA countries in East-West trade
(in per cent)*

	Import					
	European CMEA-countries			Soviet Union		
	1965	1970	1975	1965	1970	1975
Foodstuffs, livestock	19.5	9.3	12.4	22.0	7.3	16.5
Of this: cereals	8.9	3.5	9.3	15.6	3.4	13.9
fruits, vegetables	2.4	1.8	1.1	2.3	1.6	0.8
Beverages, tobacco	1.5	1.0	0.6	1.1	0.8	0.6
Raw materials	10.4	7.3	4.8	7.5	4.8	2.9
Of this: wood	0.3	0.2	0.1	0.0	0.0	0.0
paper, cellulose	0.8	1.6	1.1	0.2	2.0	0.9
textile fibres	5.5	2.3	1.5	3.4	1.5	1.3
Fuel	0.4	1.3	0.8	0.0	0.2	0.3
Vegetable and animal oils and fats	1.7	0.6	0.4	2.6	0.2	0.3
Chemicals	12.9	12.2	11.3	12.3	10.1	7.8
Of this: basic chemicals	5.3	4.4	4.3	5.4	3.9	3.2
pharmaceutical products	0.7	0.5	0.4	0.4	0.2	0.1
plastics, synthetic fibres	2.5	3.0	2.6	3.0	2.9	2.2
chemical materials	1.4	1.7	1.8	1.3	1.0	1.1
Manufactured goods classified by materials	20.8	26.6	29.4	17.2	27.7	30.8
Of this: products of textile industry	3.5	5.4	4.1	4.3	6.9	3.2
iron, steel	10.0	10.4	16.5	8.8	11.4	20.2
non-ferrous metals	2.4	2.6	1.1	1.2	1.1	0.3
metallurgic products	1.6	2.2	2.4	1.0	2.0	1.7
Engineering goods	28.8	35.2	36.0	32.7	40.0	36.6
Of this: non-electric machinery						
electric machines and equipments	17.4	23.5	24.3	17.7	25.2	25.0
spare parts	4.7	6.0	5.2	3.2	6.3	4.4
transport equipment	6.6	5.7	6.6	11.7	8.5	7.2
Other products of the processing industry	3.2	6.0	3.7	3.7	8.5	3.8
Of this: clothing	0.9	2.1	0.9	1.6	3.9	1.2
instruments, photographic and optical products, watches	1.2	1.6	1.2	0.9	1.4	0.9
Others	0.8	0.5	0.6	0.8	0.5	0.6

Source: OECD Foreign Trade Statistics, B Series

comparative advantages, — but to an increasing extent with developing countries with a low wage level, more favourable raw material endowment and also enjoying commercial policy preferences.

At the same time, the intra-industrial specialization, especially the division of labour in the engineering industry most closely connected with it, develops to an increasing extent under the organization of the big multinationals, within the framework of global re-sourcing, technical, financial, organizational and often also ownership link-ups of dif-

Table 3

CMEA-exports to developed capitalist countries and their main structural proportions (in per cent)

Groups of products	Federal Republic of Germany	GB	France	Italy	Sweden	Switzerland	The Netherlands	Austria
Foodstuffs								
1965	24.0	17.9	14.0	33.9	9.2	31.5	19.6	22.5
1970	16.8	23.9	13.6	34.6	11.3	26.8	12.1	11.8
1975	11.2	9.6	11.4	17.3	4.1	18.4	5.5	10.2
Beverages, tobacco								
1965	2.5	0.1	1.9	2.9	0.4	1.8	0.3	1.2
1970	1.7	0.2	1.5	0.2	0.6	0.0	0.5	0.9
1975	1.1	0.2	0.5	0.4	0.4	2.5	0.3	0.9
Raw materials								
1965	33.9	43.0	27.9	20.0	9.9	14.0	27.9	16.3
1970	20.5	34.6	20.9	18.5	12.5	9.8	19.5	18.5
1975	12.6	30.0	13.3	14.1	12.6	2.9	8.4	15.0
Sources of power								
1965	11.0	0.4	33.6	23.0	30.3	13.0	3.1	33.7
1970	13.8	0.2	25.7	24.7	25.0	11.1	10.1	39.3
1975	31.2	13.8	34.4	44.9	44.9	31.2	41.5	49.1
Vegetable and animal oils and fats								
1965	3.2	1.1	0.2	0.1	0.3	2.7	1.5	2.9
1970	3.1	1.6	1.1	0.1	0.6	3.3	4.7	2.9
1975	2.3	0.1	3.7	0.1	0.2	6.2	1.2	2.5
Chemicals								
1965	4.9	4.5	4.1	3.8	9.3	10.6	6.2	3.6
1970	5.2	5.2	5.3	4.1	6.5	11.1	6.0	6.6
1975	4.7	5.5	7.1	3.9	6.0	7.8	4.6	6.7
Processed raw materials								
1965	13.6	26.3	9.6	11.4	25.3	16.0	20.3	11.5
1970	21.7	21.8	15.2	12.3	24.4	22.9	19.5	12.7
1975	16.3	16.0	10.1	9.6	12.6	16.1	9.9	7.8
Machines								
1965	2.8	2.0	5.5	1.0	5.0	2.7	9.3	6.5
1970	7.0	5.4	10.5	4.0	9.5	3.9	10.2	4.9
1975	5.4	12.3	10.0	6.9	10.4	5.5	9.8	4.9
Other industrial articles								
1965	2.0	4.5	3.1	1.3	10.2	7.5	11.2	1.7
1970	7.4	7.0	5.3	1.5	9.5	9.1	16.7	2.0
1975	12.8	12.1	9.0	2.6	8.8	9.4	18.8	2.8
Non-specified items								
1965	2.1	0.1	0.1	2.6	0.1	0.2	0.6	0.1
1970	2.8	0.4	0.9	0.0	0.7	0.0	0.7	0.4
1975	2.5	0.0	0.5	0.2	0.0	0.0	0.0	0.1

Source: OECD Foreign Trade Statistics, B Series

ferent producing enterprises, and with the coordination of sales network. Without proper institutional forms and background of industrial cooperation, the intra-industrial division of labour develops only slowly particularly in the engineering industry being more sensitive to the intensity and elasticity of cooperation.

Naturally, the main regional structural proportions of the turnover of East-West trade are not uniformly characteristic of relations with the individual western countries. Depending on the patterns of growth, the character of orientation of economic policy and the economic potential of the individual countries the commodity structure of East-West trade shows considerable differences.

The data of Table 3 well indicate that the total proportion of industrial goods in the exports of CMEA-countries between 1965 and 1975 increased from 24.4 to 41.3 per cent in trade with West Germany, from 37.4 to 45.9 for Britain, from 22.4 to 37.3 for France, from 37 to 38.8 for Switzerland and from 20.1 to 23.2 per cent for Italy, while it decreased from 47.4 to 43.1 per cent for the Netherlands, from 49.9 to 37.7 for Sweden and from 23.9 to 22.3 for Austria. The industrial division of labour is partly more advanced where the per capita income level and the proportion of the servicing sector are higher and the process of the transfer of industry and of a radical transformation of structure have begun. At the same time, because of the important political aspects of the industrial division of labour between East and West the dimension of the industrial division of labour widened first of all in the bigger market economies which also considered political aspects and with more extensive and diversified markets.

There are close connections as well between the imports structure of CMEA countries and their geographic particularities. In recent years most CMEA countries tried to establish cooperation with western countries first of all on bigger investment projects designed to produce structural changes. However, on big projects, the solution of new problems arising in the cooperation between enterprises working in differing socio-economic systems requires complex expertise, a comprehensive organizational background, a capacity for the transplantation of know-how and financing resources. Smaller western countries or those lagging behind in their own structural development can hardly meet these requirements. Thus, for example, the proportion of machines increased from 42 to 43 per cent in CMEA imports from West-Germany, from 36 to 44 per cent from Britain, from 27 to 48 per cent from France, but at the same time it decreased from 31 to 30 per cent in the case of Austria and from 32 to 23 per cent in that of the Netherlands. Therefore, the commodity patterns of East-West trade of market economies at the same level of development show considerable deviations reflected also in the dynamics of turnover and the equilibrium in terms of countries.

The way of easing structural problems

As against the structuralist dogmatism forcing a certain quantifiable correlation of growth process and economic structure into the strait-jackets of abstract models of eternal and universal validity for each country views have gained ground again following the price-explosion of raw materials in 1973, which proclaimed the long-term advantages of specialization in terms of extractive industries referring to the limited availability of

natural resources, or such as neglected the structural factors of international economic relations on the basis of differences in concrete sales problems of particular products.

At a time of world-wide acceleration of changes in economic structures and of the increasing differentiation of technological-structural development levels the concrete structure is of growing importance from the point of view of the competitiveness. True, competitiveness is not necessarily attached to certain industries and it can be observed within each industry that takes part in world trade that goods representing a higher level of processing and quality, allow for the realization of higher values, too. It is true, however, that, for example, light industry firms producing average or less than average quality goods in a medium developed country with a per capita national income amounting to \$U.S. 2000–3000 where hourly wages amount to \$ U.S. 1–2 cannot be competitive enough at long-term even given advanced work organization and high individual performance with enterprises of less developed countries manufacturing at a roughly similar technological level but with hourly wages amounting to only 20 to 50 cents. In other cases the market organizational particularities of certain goods require structural adaptation. It is another question again that, apart from cyclical fluctuations, the source of economic power in the present world economy is first of all technological superiority embodied also in the degree of processing of the individual products. In the period of an expanding international economic integration competitiveness is more closely connected with the structure of supply of individual countries than before.

Therefore, from the point of view of the further development of East-West economic cooperation the structural factors of the competitiveness of CMEA countries and especially the export supply are of decisive importance in the long run. The preconditions of further development are naturally highly varied: they may be of economic or political character, related to internal and international issues and effective in the short or long run, respectively.

In purely theoretical research more attention should be paid to the examination of basic principles of expedient specialization and requirements of the division of labour to be developed on the basis of economic efficiency and the efficiency ratios of the factors of production in the individual countries.

Structural development of East-West trade raises special problems both as regards economic policy and the overall system of control and management. Structural elements of competitiveness urge on the further development and corrections of the economic structures, the prioritization of structure policy, the elimination of inefficient producers and outdated structures as well as the expansion of the advance sectors and units sphere of production. The development of the production pattern cannot be imagined, however, without the further growth of marketing. Sales of raw materials and agricultural products, usually those of traditional trading goods and products of light industry require relatively simple forms of marketing which can easily be centralized. In the trade in machines, however, the organizational requirements of sales, servicing and demands for information differ. Therefore, the organization of sales and the commodity patterns are closely connected.

According to a survey by the UN Economic Commission for Europe more than two fifths of industrial cooperation agreements established in East-West relations fell to Hungary and more than one fourth to Poland, respectively, on the one side, and half of

them to West Germany on the other. In the turnover of goods realized with West Germany the proportion of cooperation supplies amounted to 15 per cent in the case of Poland and to 8–9 per cent in that of Hungary, although these supplies were of much greater importance in the division of labour in industry and especially in the engineering industry. The effect of agreements on industrial cooperation and specialization and on structural developments is unambiguous, but their range is rather narrow, both as regards the countries and industries concerned.

To increase complementarity of East-West economic relations means greater tasks for foreign policy and foreign economic relations as well. It is a world-wide fact that states render more and more help to firms in solving their problems connected with structural adjustment in consequence of the accelerated technological and structural development. In countries sensitive to foreign trade, however, a structure policy of a national economic character alone is not sufficient, the adaptation to international structural developments requires the international coordination of national structure policies. The expedience and efficiency of the present rearrangement process in the world economy increasingly requires that the regulation of international structural transformation, thus also the coordination of the division of labour between East and West, shall be included in the organizational system of international cooperation.

ТОВАРНАЯ СТРУКТУРА ТОРГОВЛИ МЕЖДУ ВОСТОКОМ И ЗАПАДОМ

Б. КАДАР

В результате ускорения структурных сдвигов в мировой экономике проблематичной стороной внешнеторговых связей между Востоком и Западом становятся структурные факторы и связанные с ними нарушения равновесия. За последнюю четверть века товарная структура внешнеторговых связей между Востоком и Западом практически не изменилась, удельный вес обработанной продукции в экспорте стран-членов СЭВ колебался около 40 процентов, а в их импорте из западных стран доля промышленных изделий возросла с двух третей, до более чем трех четвертей.

В этих особенностях структуры товарного оборота суммарно отражаются факторы, связанные с различием исторического наследия, систем управления экономикой и целей экономической политики, а также особенности связей между странами, находящимися на различном уровне развития и обладающими различным экономическим потенциалом.

Товарная структура внешнеторговых связей между Востоком и Западом – вследствие ее структурной неподвижности – все более напоминает межотраслевое разделение труда между индустриально развитыми капиталистическими странами и развивающимися странами. В отличие от предыдущих двух десятилетий экспортеры промышленной продукции стран-членов СЭВ во второй половине 70-х годов уже конкурируют, скорее, не столько с отстающими отраслями развитых стран, сколько с промышленностью развивающихся стран с низким уровнем оплаты труда, располагающими более благоприятной сырьевой базой и зачастую пользующихся льготами по линии торговой политики. В международном плане внутриотраслевое разделение труда, в особенности в машиностроении, разворачивается в рамках технико-финансово-организационного сплетения различных производственных предприятий, зачастую, на базе сплетения прав собственности. Если же этого нет, то дело продвигается с

трудом. Индустриальное разделение труда между Востоком и Западом более быстрыми темпами развертывается с более крупными развитыми капиталистическими странами, располагающими более широкой технико-финансово-организационной базой, претерпевающими динамический процесс преобразования структуры экономики и имеющими определенные политические цели.

На нынешнем этапе развития мировой экономики возрастает значение экономической структуры с точки зрения международной конкурентоспособности. Развитие структуры торговли между Востоком и Западом требует неотлагательного развития, с одной стороны, систем управления, обеспечения приоритета структурной политики, совершенствования организации сбытовой деятельности и, с другой стороны, снятия международных торговополитических барьеров. Эффективность подключения отдельных национальных экономик к тенденциям международного развития, а также протекающей перестройки структуры мировой экономики вызывает необходимость в международном координировании национальных структурных политик, подключения отношений между Востоком и Западом к организационной системе международного сотрудничества.

B. SZABADI

PERFORMANCES OF THE TERTIARY SECTOR IN HUNGARY – AN INTERNATIONAL COMPARISON

The findings of the author only partly justify the opinion that the tertiary sector is a relatively backward branch of the Hungarian national economy. According to the calculations of the author, the output of the Hungarian service industries roughly corresponds to the economic development of the country on the basis of international experience. The adequate output is, however, based upon inadequate resources. From this follows the unsatisfactory quality of services. Although Hungary represents the international average as to the total volume of output, the contribution of individual branches differs widely from the sample chosen. A large part of the differences can be derived from economic reasons and only a relatively small part follows from the differences in the social order.

In recent years the economic role of the tertiary sector* has been recognized in Hungary. By now it is no longer challenged that services are passive factors in the economy, but on the contrary, their standard actively reacts on the development of production and consumption, on intensification, on economic growth.

A basis of measurement and reference is necessary for a judgement of the situation of services in Hungary, partly in order to determine the position in absolute terms, and partly to be able to monitor the changes – if a longer period is analysed. At the same time, the study of services is typically a field of the economy where arising questions cannot be answered by relying only on domestic experiences. International comparisons are required. Several international comparisons [1, 2, 3], though of varying depth, have been recently published about the tertiary sector. This paper differs from them chiefly in that it analyses not only their share in resources but also the outputs (performances) and their pattern, furthermore, in that it consistently compares the domestic pattern of services to a certain international mean.

The function describing the relationship between the level of economic development (GDP, the per capita value added) and the contribution to GDP is generally applied in international practice. The international trend has been determined on the basis of data relating to 18 OECD countries. The countries covered by the analysis vary in development level relative to Hungary. Comparison to capitalist countries was done because of the insufficient data base about services in socialist countries (no data are available about the contribution by the tertiary sector to GDP, and the range of necessary physical indicators is far from being full). By means of physical indicators, though with several assumptions, also the performances of tertiary sectors in two other socialist countries (Czechoslovakia and Poland) were recorded.

*According to the classification applied in the analysis, the tertiary sector includes transport and communications, trade, personal and housing services, health and cultural services as well as public administration and other services not classified elsewhere.

There are two ways to analyse the performance of the tertiary sector:

1. Comparison of the various countries' value data (contribution to GDP); in this case a rather significant, more than 20 per cent, lag of the service performances is shown for Hungary, a figure affected decisively by the different valuation of performances. In Hungary, namely, the price and financing systems are profoundly different from those in the countries covered by the comparison, and so is, therefore, the distribution of the net income among the economic sectors.

2. Comparison of indicators in physical terms which are then weighted with the Hungarian value indexes. Having thus eliminated the distorting effects caused by the different valuation of performances, the results showed that with respect to the volume of service performances, Hungary (as well as Czechoslovakia and Poland) is close to the international average, i.e., in Hungary approximately the same amount of services are performed as in similarly developed capitalist countries.

At the same time the quantitatively satisfactory performance is not supported adequately from the side of manpower and fixed assets basis. According to our calculations in Hungary the service branches attain the same volume of performance as the tertiary sector of a similarly developed capitalist country with about 20 per cent smaller staff and about 25 per cent less investment [4]. The poorer supply with factors of production is felt, as shown by several analyses, in the efficiency of material production. The inadequate quality of the services is shown chiefly in time losses as well as in other losses (e.g. damage to the goods etc.). The quality of consumer services, again, strongly determines the level of the reproduction of labour, thereby in an indirect manner also the efficiency of material production. The inadequate quality of performances is likely to be a cause for the incomparably smaller role of invisible exports (tourism, transit transport, forwarding done abroad, international revenues from communications etc.) in financing imports in Hungary than in the 18 OECD countries studied.

Description of the applied method

The method of international comparison of performances is based on the following relationship:

The value added by any branch or sub-branch of services can be written as follows:

$$y_{ji} = \frac{y_{jh}}{x_{jh}} x_{ji}$$

where

y_{ji} = the value added by branch (sub-branch) j in country i ,
 x_{ji} = the physical indicator related to the value added by branch (sub-branch) j in country i ,
 $\frac{y_{jh}}{x_{jh}}$ = the domestic data of the coefficient (value added per unit of the physical indicator j).

The output can be thus expressed as a product of the coefficient functioning as the weight and of the physical indicator. The coefficients were determined on the basis of

Hungarian GDP data. This has its advantages and disadvantages. It is considered to be an advantage that the problems of comparability caused by specific national value indicators and consequently the uncertainties in the evaluation of results could be avoided. At the same time, the exclusive use of Hungarian value indicators is favourable only in relative terms, since the Hungarian price, financing and costs conditions are thus assumed to be valid for the countries covered by the comparison. It would have been certainly helpful to make the calculations with GDP indicators of other countries too, but in lack of data this was unfeasible in such a depth. It is hoped, however, that the method applied is acceptable and causes only slight distortion, considering that the objective was to measure the volume of performances.

The method presented has made it possible to record other countries' tertiary sectoral patterns according to the Hungarian nomenclature and in a more detailed breakdown than figuring in their own balance statements. By this method we succeeded also in determining the value added by the service branches of two socialist countries, Czechoslovakia and Poland, which do not draw up any GDP balances.

The accuracy of the result obtained depends largely on finding those physical indicators whose development is characteristic enough of the output of the given branch (sub-branch). Accuracy is improved by the use of a very detailed nomenclature from two points of view. Namely, in case of a deeper breakdown, the physical indicators can be denoted relatively unambiguously, and because of their large number the error caused by the use of some not quite proper indicator will be negligible.

Value added by the tertiary sector in Hungary, by branches (sub-branches) in 1971*

The output of the tertiary sector is presented by the publication titled *Népgazdasági Mérlegek 1971* (National Economic Balances 1971) in the following sectoral breakdown (12 sectors, 5 sector groups):

Transport

Communications

Transport and communications

Home trade

Foreign trade

Trade

Personal and business services

Housing services

Personal and housing services

Health and social services

Cultural services

Scientific services

*The year 1971 was chosen for compiling the data base because for some of the 20 countries examined no later data were available for each sub-branch.

Health and cultural services
 Administration and defence
 Banking services
 Other services
 Administration and other services

A nomenclature of this depth could not answer our requirements regarding the analysis of the pattern; a more detailed breakdown by sub-branches was needed. Therefore 63 sub-branches were designated, essentially in compliance with the industrial classification of the economy. The reason of a few deviations is that only sub-sectors with available characteristic international physical indicators could be included in the analysis. The sub-branch 'social services and recreation', insignificant by its weight, was omitted from the tertiary sector. A total of six 'other' sub-groups were created, their development is obtained as a certain percentage of the development of the branch.

A few rearrangements were made in the nomenclature, and a new branch was created. This was required for the approximation of the groups, for the international comparability of the tertiary sector, and for the interpretation of the results obtained. 'Business services' were included in 'Banking services'. (In the capitalist countries both types of services also include so-called parasitic activities.) The scope of the tertiary sector was extended by 'Services to the population' (unlike in the countries covered by the comparison, services to the population are recorded in Hungary in the scope of industry).

Thus, as opposed to the official classification, the term tertiary sector as used in this paper does not contain the sub-branch 'Social services and recreation' but includes the sub-branch 'Services to the population'.

Special mention should be made of the definition of the value added by the services to the population. The data of the gross output by types of services were corrected. The factor of correction was the proportion of the value added to the values of gross output in so-called representative companies doing the bulk of the given services, e.g. the GELKA (Engineering Industrial Electric Maintenance Co.) for the repair of telecommunication equipment, AFIT (Car Maintenance Industrial Trust) for car repairs, etc.

Any international comparison will be a result of compromise because, owing to the differences in data recording, one often cannot select the solution deemed to be the most expedient but has to accept only the best of the practicable ones. This was the case with the international comparison of the tertiary sector too, and in two senses:

1. it is the performance indicators that bear the closest relationship with output, still the application of capacity and staff data could not be excluded, although their bearing is not too big (a total of 55 indicators were used, 44 of these relate to performance or potential performance, 3 to capacity, 7 to staff, and 1 is a value indicator).

2. in a few instances estimation or correction was unavoidable.

The value added by the tertiary sector in Hungary in 1974 was determined as a product of the physical indicator for 1974 and the coefficients of 1971. (The functions used as a "standard" show the Hungarian price and costs conditions also for the year 1971.).

Analytical regression computations were used to determine the international trend. A function mainly with two variables and sometimes with several variables expressed the

international trend. The level of economic development was an independent variable in each case. The dependent variable was the per capita value added by the different branches (sub-branches). The proportion of the different branches' performances within the GDP of the tertiary was not taken for dependent variable, because that would only inform about the distribution of an identical volume of tertiary performance according to the tendency, but would not indicate the extent of the deviation of the performances of Hungarian tertiary branches from the international average. [Sea navigation was omitted from the study as its role depends fundamentally on the country's geographical location and other specific factors rather than on the development of the forces of production (the per capita GDP of this sector is far higher in Greece than e.g. in the Federal Republic of Germany)].

Structure of the tertiary sector

Table 1 is a summary of the results of the computations regarding the performance of the tertiary sector by branches.

The data indicate that the total performance of the tertiary sector develops in Hungary according to the international tendency. I.e. the volume of services performed in this country is approximately the same as in a capitalist country of similar economic development level.

However, within the value added by the tertiary sector, the weight of the various groups of branches is highly different. In Hungary the per capita GDP calculated for 'Transport and communications' and for 'Administration and other services' is much

Table 1

*Value added, actually and according to the trend,
by the tertiary branches in Hungary in 1974*

Branch	per capita value added				
	in Hun- gary	inter- national average	Hungary as per- centage of the average	percentual distribution	
				in Hun- gary	inter- national average
	Forints				
Transport and communications	2696	2266	119.0	23.0	19.0
Trade	4520	4643	97.4	38.6	38.9
Health and cultural services	1583	1524	103.9	13.5	12.8
Urban public services, housing services	618	782	79.0	5.3	6.5
Banking and business services	614	896	68.5	5.3	7.5
Personal and other services to the population	335	788	42.5	2.9	6.6
Administration and other services	1338	1048	127.7	11.4	8.7
Total	11704	11947	98.0	100.0	100.0

higher than in the countries covered by the comparison. The performance of 'Trade' and of 'Health and cultural services' develops according to the international average. At the same time the other three groups are essentially lagging behind.

The analysis of the performances of the tertiary sector is continued hereunder by groups.

1. *Transport and communications*

Transport* is a bottleneck of the Hungarian economy, at times there is such congestion in transport which affects the continuity even of production and of foreign trade. For the bottleneck partly the relatively much transport is to blame. According to our calculations the per capita transport performance is considerably, by about 33 per cent, higher in Hungary than the international mean.

The question might be justly asked whether the excessive transport is not explainable by particular economic-geographic features (as differences between countries may be quite considerable in this respect.) To clear up this point, in the determination of the international tendency the geographic location and the situation established in the regional division of labour were also considered as independent variables in addition to the level of economic development. Thus, for instance, in the examination of freight by rail the building length was also included in the function, assuming that the building length of railways, showing remarkable stability in time, characterizes well the extent of economic relations among the country's regions. The geographic (transit) location of a country obviously affects the volume of transport. This was considered by means of an alternative variable (continental transit country - 1, non-continental transit country - 0). In the present case the different economic-geographic features do not explain satisfactorily why Hungary's transport performance is above the international value.

It is seen from Table 2 that the deviations between the performances of the various transport sub-branches and the international average are rather variable. The biggest volume of surplus transportation is done by the railways (+93.5 per cent), and also road traffic is above the international mean (+16.3 per cent). The per capita performance of urban transport and forwarding essentially agrees with the international tendency, while those by river or air are quite considerably lagging behind the international average (80 and 75 per cent, resp.).

The transport performances were examined not only by sub-branches but also by types of transportation. While the performance of passenger transport is about corresponding to the international tendency (105 per cent), freight transport shows a 52 per cent excess. The reason is to be found in the pattern of production, in the material requirements of production, and last but not least, in the great reserves in organizing transportation work (unnecessary performances, e.g. cross deliveries, etc.). Two disadvantages derive from surplus freight-transport in comparison with the international average. Firstly, it adds to the costs of the goods, thereby diminishing their competitiveness (this way the same volume of national income is produced with freight costs higher by about 50 per cent than the tendency), secondly, a part of the transport capacity, often a

*Exclusive of sea navigation.

bottleneck, is engaged in fact unnecessarily. Hungarian transportation exerts a freight transport performance by about 50 per cent above the international tendency with about 25 per cent less investments.

The situation of communications is completely different. Here the per capita performance was by about 23 per cent less in 1974 than the international mean. Within

Table 2

*Value added by transport and communications actually
and according to the trend, by sub-branches,
in Hungary in 1974*

Branch, sub-branch	per capita value added		
	in Hungary	International average	Hungary as percentage of the international average
Railway transport	1153	596	193.5
of which:			
Freight	937	446	210.1
Passenger	216	150	144.0
Road traffic	972	836	116.3
of which:			
Freight	696	528	131.8
Passenger	276	308	89.6
River transport	24	116	20.7
of which:			
Freight	21	111	18.9
Passenger	3	5	60.0
Urban transport	66	70	94.3
Air transport	14	55	25.5
Forwarding	42	40	100.5
Transport	2271	1713	132.6
Communications	425	553	76.9
Transport and communications	2696	2266	119.0

communications the following five types of services were examined (the physical indicators used are in brackets): post (number of letters & parcels), telegrams (number of cables), telephone (number of sets), radio (broadcasting time) and television (broadcasting time). The lag behind the international average is caused virtually by the level of supply with telephones. The given telephone situation affects the efficiency of utilizing working time disadvantageously. As many calls meet the busy sign, the time available for effective administration of affairs is shortened.

2. Trade

Essentially two indicators are available to approach the home trade turnover: consumption of material goods by the population (something realized chiefly through home trade), and the staff employed in trade. Considering that the turnover per one employee in trade may strongly vary by countries, it was decided to use the first indicator. Consumption by the population was examined by 17 commodity groups, the data in physical units of measurement were summarized by weighting with Hungarian unit prices.

In 1974 the per capita value added by trade attained in Hungary about 97 per cent of the international average. However, this home trade turnover, actually corresponding to the level of economic development, is attained with a staff by about 30 per cent smaller than the international mean. The number of employees in home trade per 1000 inhabitants is 42 in Hungary and 54 in capitalist countries with similar economic development. No one would assert that the number of employees in capitalist countries is the optimum figure, nevertheless it is sure that in Hungary much more would be required than 42 per one thousand inhabitants. Several experts estimate the staff deficit of home trade at appr. 50 to 100,000 people [6]. The manpower situation of home trade and the composition of the shop system are interactive. Partly, the consequences of the shortage of personnel (long queues, relatively long shopping time) are felt increasingly because of the many shops with small area. (These shops are not suitable for mechanized unloading — e.g. for transport by containers — and are incapable of displaying the complete assortment, therefore the same shopping claim may emerge in more than one shop.) On the other hand it is harder and harder to provide the staff required for starting the new and very up-to-date shops, sometimes only at the expense of closing smaller ones.

In *foreign trade*, the other branch of trade, the per capita performance was also equal to the international average in 1974.

3. Health and cultural services

31. *Health services.* Free health services are extended by now to everybody by right of citizenship in socialist Hungary. The extension of free-of-charge medical and health services to the entire population yields performances of quite a big volume. In this country the per capita value added by the health services is by 36 per cent higher than the international average, i.e., considerably more than in a capitalist country with similar economic development. The supply with factors of production is relatively not high in comparison with the volume of performances and with the very advanced social insurance system. The quality of performances, supported inadequately from the side of manpower and fixed assets basis, is sometimes not satisfactory. (This is important also because the quality of the reproduction of the main force of production: manpower, and thereby, *inter alia*, the utilization of the working time fund, are affected not only by the extent, but also by the quality of the health services.) The time spent on one patient hardly increased in the district consulting rooms since 1955: in 1973, 5.5 minutes were spent on a patient, that is, much less than required (10 minutes) [7]. The polyclinics, the other out-patient attendance system, are no less congested. In Hungary the bed-patient per-

formance per 1000 inhabitants is 50 per cent higher, while, at the same time, hospital beds are 6 per cent less than in the countries covered by the comparison.

32. *Cultural services.* It used to be a general view that the rate of economic growth depends fundamentally on the changes in technological equipment. In the various growth models education was considered to be an exogenous variable, and, assuming the invariability of this factor, its bearing was hardly taken into account. Today economists agree that the so-called human factors of growth play very important roles in economic expansion. Denison attempted to quantify the impacts of education [8]. Though some reservations are in place with respect to his numerical findings — since the level of education affects economic growth via many a complex gears (the mechanism of utilization of knowledge, the extent to which theoretical and practical knowledge is used in production, in economic organization etc.) — Yet it is an enormous merit of his work to bring the point forward. The economic role of education has been recognized in Hungary too. Thus for instance Tibor Erdős in his book 'Economic growth in advanced capitalist countries' [9] emphasizes the importance of matching professional structure and working place structure (composition of machinery).

The performances of education were confronted by comparing the number of students. (Naturally, this way we could not get any idea about the quality level of the different types of education nor about the up-to-dateness of the knowledge transferred, but this was not considered to be our objective either.) Bearing in mind the marked difference of the educational costs per student by types of education, the structure of education is also expressed by the numerical results. (The state and level of higher education have a greater bearing on the deviation from the international average than e.g. of secondary education.)

According to our calculations the per capita value added by education was less in Hungary in 1974 than the international average. As a matter of fact, most — three quarters — of the about 20 per cent lag behind the tendency is caused by the relatively low proportion of the inhabitants aged 0 to 24 years in this country. Consequently, the performance yielded by the Hungarian practice of involving the population in the corresponding ages into education is actually similar to the measure in countries covered by the comparison.

The educational performances were studied also by types of education: Hungary is positioned rather well as regards pre-schooling tuition, the number of apprentices per 1000 inhabitants corresponds to the international average, while the situation of secondary and higher education is not that advantageous. (A lag is observed also in comparison with the neighbouring socialist countries: in Hungary the proportion of the population studying at universities and other institutes of higher education is about the half of that in the corresponding ages in Czechoslovakia.) Primary education was not covered by the analysis because it is compulsory in every country. However, the different durations of primary education in different countries were taken into account in the calculations.

Since the performances of the other two branches of cultural services were remarkably higher than the international average (see Table 3), the per capita value added by the group (Ft. 972) developed nearly according to the international trend (92.5 per cent).

33. *Science and scientific services.* According to our calculations the per capita performance of science and scientific services was higher by 11.9 per cent in 1974 than

Table 3

Value added by cultural services, actually and according to the trend, in Hungary in 1974

Sub-branch	Per capita value added		
	In Hungary	International average	Hungary as percentage of the average
	Forints		
Education	694	869	79.9
Arts	66	41	161.0
Artistic institutions and other cultural services, sports	212	141	150.4
Total	972	1051	92.5

the value corresponding to the international tendency. This result must be handled with certain reservation. Namely, the performances were approximated with the number of full-time research workers in lack of data. This indicator, however, may cause distortions in two ways, because neither the number of the auxiliary staff – with obvious bearing on the productivity of the researchers' work – nor the supply with technical means – an important factor in the success of research – are taken into account.

Table 4

Value added by urban economic services, and by housing services, actually and according to the trend in Hungary in 1974

Sub-branch	Per capita value added		
	in Hungary	International average	In Hungary as percentage of the average
	Forints		
Urban economic services	214	260	82.3
Housing Services	404	522	77.4
Total	618	782	79.0

4. Urban economic services, housing services

In 1974 the per capita performance of the group amounted to 79 per cent of the value corresponding to the level of Hungarian economic development.

The Hungarian situation in urbanization is characterized by this appr. 18 per cent lag shown in the urban economic services. The per capita value added by housing services was

lower by nearly 23 per cent than the international trend. The reason is to be sought in the different number of rooms per 1000 inhabitants. While in Hungary in 1974 one thousand inhabitants shared 931 rooms, this figure averaged 1203 in capitalist countries of similar economic development. (According to the recommendations of the UN Statistical Office the following were considered as rooms: bedroom, dining room, living room, servant's room, and kitchen of at least 4 sq. metres floor area.)

5. *Banking and business services*

Several Marxist economists ascribe the level of services attained in capitalist countries almost exclusively to the different social system, primarily to the swollen financial sphere. They do not admit that in the employment and investment pattern characteristic of these countries objective technical-economic interrelations depending on the level of development of the forces of production are also expressed. It is deemed more helpful by the author to eliminate the specific capitalist feature than to reject international comparison. Demonstration of the banking institutions' weight provides very important information for earmarking the desirable trend of development.

Table 5
*Value added by banking and business services,
actually and according to the trend, in Hungary in 1974*

Sub-branches	Per capita value added		
	in Hungary	International average	In Hungary as percentage of the average
	Forints		
Banking services	171	436	39.2
Business services	443	460	96.3
Total	614	896	68.5

The data of Table 5 show that the banking services extended in Hungary in 1974 were about 60 per cent less than the international average. The deviation is substantial and, due to the difference between the social systems necessary as well, it is noted, however, that the performance of banking institutions does not represent a considerable proportion in the output of tertiary sectors of countries covered by the analysis. The banking institutions' weight amounted to 1.2 to 4.5 per cent in the value added by services branches in 18 OECD countries. (In Hungary this branch contributed in 1974 1.5 per cent of the output of the tertiary sector.) In the analysis of contribution to GDP this time it is far more important to show how much the different role of the banking institutions modifies the employment and investment tendency defined by us. In 1971, in the capitalist countries covered by our study 2 per cent of total employment worked on average for banking institutions (the two extreme values being 0.6 per cent for Spain and 3.2 per cent for Switzerland). If the 0.6 per cent rate characteristic of Hungary were considered as

realistic for these countries too, then the international tendency would be modified inasmuch as e.g. in 1970 estimated manpower deficit of the Hungarian tertiary sector would not be 20 per cent but "only" 17 per cent. The different economic role of banking services has hardly any bearing if at all on the outlined investment trend, since the building and equipping in monetary institutions do not belong to the highly capital-intensive projects.

Like banking services, also the business services of capitalist countries include "parasitic" activities. According to our calculations the per capita performance of the business services was of a measure corresponding to the international average in 1974. The deviation from the tendency appears in the internal pattern in Hungary: advertising and publicity activities are of little importance, organization and mechanization of administration are predominant.

6. *Services to the population and personal services*

Although according to the Hungarian system of classification services to the population belong — as mentioned above — to industry, yet for sake of international comparison it seemed expedient to consider them within the tertiary sector. This rearrangement was motivated also by the wish to clarify whether the services to the population represent such weight in the tertiary sectors of the countries covered by the comparison which may visibly alter the employment and investment tendency. In our computations the services to the population represent an insignificant proportion — on average 3 per cent — within the GDP of the tertiary sectors in the countries examined.

Table 6

*Value added by services to the population and to individuals,
actually and according to the trend,
in Hungary in 1974*

	Per capita value added		
	In Hungary	International average	In Hungary by percentage of the average
	Forints		
Services to the population	196	477	47.1
Personal services	139	311	44.7
Total	335	788	42.5

In Hungary the per capita GDP of services to the population was equivalent to 41.1 per cent of the value corresponding Hungary's economic development level. For considerations of data collection we worked with stock data as physical indicators assuming that the repair and maintenance of more durable items are proportional to their stock. Thus, our lagging behind the international trend can be explained with the lower supply with certain articles with a longer life-time, mainly durable consumer goods.

There are two explanations for the more than 50 per cent deficit of personal services. One of the reasons is a certain deviation between the coverages of data recording which we were unable to eliminate, the second one is the low significance of household services: in Hungary there are fewer domestic servants than in capitalist countries.

7. Administration and other services

Together with the group transport and communications, Hungary exceeds the value corresponding to the international tendency to a considerable extent (27.7 per cent) in the branch of Administration and other services including central and local administration, defence, jurisdiction, public security, political and social organizations, international organizations. (See Table 1). The bigger difference is probably due to the difference between the social systems, primarily to the specific requirements of planned economy. We mean that the scope of the state's economic tasks is wider in a socialist country, in accordance with the requirements of central control.

Structure of the tertiary sectors in Czechoslovakia and in Poland in 1971

The differences which distinguish the output pattern of the Hungarian tertiary sector from the average patterns in OECD countries have been demonstrated above. To know how general the outlined deviations are and whether these are valid chiefly for Hungary or are to be considered as generally true for the socialist countries provides another reference to judge the situation of the services here. In the course of our research work, by means of the method presented in this paper and used for the comparison with OECD countries, we were able to present the structures of also the Czechoslovakian and the Polish tertiary sectors in a comparable form, and thus the opportunity was given to answer the above question.

According to the data of Table 7 the direction of deviations from the international tendencies are identical in the three socialist countries while the rate of differences varies. The biggest difference was recorded in transport and communications; in Czechoslovakia and Poland the difference between the per capita performance of this branch and the international average even exceeds the Hungarian value (by 53 and 42 per cent, resp., in 1971.).

In this paper, with the distorting effects of the different performance valuation methods eliminated, it has been shown that in Hungary the per capita value added by the tertiary sector is approximately the same as in capitalist countries with similar economic development. Thus, the volume of performances justifies that services be given a bigger share from the factors of production. True, the pattern of this sector's performance is different in this country – and in the socialist countries as a rule – yet the structural difference is not an argument for the poorer supply of the service branches with manpower and fixed assets. The manpower and fixed assets requirements of the Hungarian performance pattern are namely nearly the same as the similar requirements of the average pattern in European capitalist countries covered by the analysis.

Table 7

*Actual value added by the tertiary sectors in percentage of the GDP,
compared to the international tendency in three
socialist countries**

Branch	Per capita gross domestic production		
	Czechoslovakia 1971	Poland 1971	Hungary 1974
	as percentage of the international average		
Transport and communications**	152.8	142.0	119.0
Trade	82.5	77.1	97.4
Health and cultural services	98.5	108.4	103.9
Urban economic services, housing services	69.3	73.6	79.0
Banking and business services	50.4	55.7	68.5
Services to the population and personal services	44.8	30.5	42.5
Administration and other services	122.0	113.9	127.7
Total	95.4	100.0	98.0

*In lack of physical data the per capita value by banking and business services, and of administration and other services were estimated on the basis of the corresponding Hungarian data. (They are unlikely to develop completely differently in the three socialist countries.) Therefore, the extents of deviation of not only these two branches but of the entire sector are mainly informative.

**Without sea navigation.

Relying on the data of the input-output table drawn up by the Hungarian Central Statistical Office the number of employees and the gross value of fixed assets required for the output of one million Forints (GDP) by the different service branches was computed, and, weighting these with the corresponding distribution percentages, the manpower and fixed assets requirements of the actual and the "trend-conform" sectoral structure of performances was obtained. Accordingly, in case of a performance pattern corresponding to the international average, the production of an identical volume of value added would require in Hungary by about 4 per cent more employees and by only 2 per cent more fixed assets.

The problem of supply with factors of production was approached from another side too: it was demonstrated that the outlined investment tendency is not affected substantially by the swollen financial sphere, extensive advertising and propaganda activities characteristic of the countries that served as reference for comparison.

It may emerge whether the — apparently unavoidable — faster development of the manpower and fixed assets base of the tertiary sector might not result in a slowdown of economic growth. (The productive branches would have namely a smaller share from

manpower and investments.) This is not likely. From the several possible explanations one point of view will be discussed here as part of the resources cannot be adequately utilized precisely if the various functional components of the economy are considerably disproportional. (The time losses caused by the unrealistically intensive utilization of the tertiary sector's capacities are in fact the manifestations of bottlenecks.) That is, the achievement of the optimum or at least a rational proportion between the three sectors (industry, agriculture, and the tertiary sector) and the approximation of the allocation pattern of the factors of production to the pattern of performances are preconditions of a balanced economic development.

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ВЫПУСК СФЕРЫ УСЛУГ В ВЕНГРИИ В МЕЖДУНАРОДНОМ СОПОСТАВЛЕНИИ

Б. САБАДИ

Исследования автора лишь отчасти подтверждают мнение, что в Венгрии сфера услуг — это сравнительно отстающая отрасль народного хозяйства. Так, согласно расчетам, отрасли обслуживания дают примерно такой выпуск, который соответствует уровню экономического развития страны.

Однако удовлетворительный в количественном отношении выпуск достигается в Венгрии с помощью значительно меньших ресурсов, по сравнению с международными соотношениями. Из-за недостаточности факторов производства качество услуг неудовлетворительно, что — наряду с прочим — неблагоприятно сказывается на эффективности производственных отраслей и интенсификации народного хозяйства.

Отраслевая структура сферы услуг отличается от международных тенденций. Значительная часть расхождений объясняется экономическими причинами. Например, меньший выпуск сектора связи или жилищного хозяйства может быть связан с инвестиционной практикой народного хозяйства, в то время как причина значительного избытка грузооборота кроется в структуре производства, его материалоемкости и выполнении излишних перевозок. Сравнительно небольшая часть расхождений объясняется различиями общественного строя.

В охваченных анализом двух других социалистических странах — Чехословакии и Польше — имеют место аналогичные с Венгрией отклонения от международных тенденций, причем различия наблюдаются только в мере этих отклонений.

REVIEWS

J. NYERS

FOREIGN LICENCES AND KNOW-HOWS IN HUNGARY, 1971–1975.

Connection between national income, R & D inputs and licence imports

A simultaneous development of each branch of production and economy requires increasing material and intellectual inputs. Depending on how developed a country is and how much it can afford, the volume and proportion of R & D inputs ranges on average from 1 to 4 per cent of the national income. In most CMEA countries the share of development funds reaches and even exceeds that of the advanced countries, although the per capita national income is lower.

Expenditure on research and development was 13.9 billion Forints in Hungary in 1975, amounting to 3.46 per cent of national income. The relative size of R & D funds is by international comparison moderate, lower than in several socialist countries, but higher than similar expenditures of the advanced capitalist countries.

The difference between the socialist and the capitalist countries is somewhat less than shown in the table, since the socialist countries relate their R & D inputs to the national income created by the material production branches, while the capitalist countries refer it to the gross national product. Consequently, the value of per unit expenditure of the socialist countries is somewhat higher. The extent of the deviation is shown by the difference between the values computed in two ways for the Hungarian rate (0.3–0.5 per cent).

Comparison of the data is also hampered by the fact that identical terms occasionally have different meanings. E.g. in Belgium the total R & D expenditures do not contain the costs of research in the fields of law, other than natural sciences, pedagogy and arts; they exclude those on social sciences in Italy, and those on other than natural sciences in the USA.

In Hungary the share of research expenditure in the national income grew steadily in the five-year plan period 1971–75, in recent years its rate of growth has slowed down, and in 1976–80 the present rate is expected to settle. It is characteristic of the increasing role of research and development, that the rate of expenditure relative to national income increased from 2.3 per cent in 1965 to 3.5 per cent by 1975.

A considerable part of R & D carried on in the economy serves the industry. In 1975, 53 per cent of those engaged in this activity belonged to industry, and 56 per cent of the total research inputs were accounted in industry. In the late sixties the proportion of industrial R & D inputs relative to the national income created (3.5 per cent) was much higher than in the whole of the economy (2.5 per cent). A levelling process has taken

Table 1

Ratio of R & D inputs in different countries (per cent)

Country	1967	1970	1973
Soviet Union*	3.7	4.2	5.0
Czechoslovakia*	3.6	3.6	4.3
Poland*	1.8	2.3	3.0***
Hungary*	2.2	2.8	3.0
Hungary**	1.9	2.3	2.5
France**	2.0	1.8	
Belgium**	0.9	1.3	
Italy**	0.6	1.2	1.0****
Denmark**	0.8	1.0	
Federal Republic of Germany**	1.9	1.9	2.3***
USA (current expenditures without investments)**		2.7	2.5***

*In percentage of national income

**In percentage of gross national product

***Data for 1972

****Data for 1971

Table 2

Rate of R & D inputs relative to national income in Hungary

Year	R & D inputs in percentage of the total national income	Industrial R & D inputs in percentage of national income produced by industry
1969	2.51	3.54
1970	2.79	3.85
1971	2.95	3.96
1972	2.97	3.87
1973	3.04	3.88
1974	3.29	3.93
1975	3.46	3.70

place in recent years and per unit inputs in industry are above those for the whole economy by only a few tenths of a per cent. However, for a realistic evaluation of the data it must be taken into consideration that researches aimed at rising the technical standards of industry are also carried on outside the industrial framework, foremost in institutes controlled by the Hungarian Academy of Sciences. These are engaged chiefly in basic research and thus serve industrial ends only partly and indirectly.

There are two ways of obtaining the research results securing acceleration of scientific-technical progress: partly by mobilizing the intellectual and material capacities

available in the country, and partly by utilizing the results achieved in world economy. At present only the Soviet Union and the United States have the quantity and quality of intellectual and financial resources necessary to develop the sciences and the practical implementation of the findings in an at least approximately complete range. All the other countries, among them Hungary, may attain acceptable rate of technical progress with a reasonable combination of the two types of possibilities. With identical share of R & D inputs in the national income, the proportion of domestic research work and imported technical knowledge necessarily varies by countries.

On macroeconomic level the proportion between domestic research and technical know-how purchased from abroad is fundamentally determined by the country's technico-economic performance, by the volume and pattern of production and of the related R & D. For instance, in smaller countries by area and population, where the development level is moderate, the research capacity limited in size and of determined concentration *ab ovo* determines the domestic research opportunities, and thus also the extent of intellectual imports. The spendings on foreign licences and know-how are 15 to 20 per cent of the R & D inputs in Japan, the Federal Republic of Germany and France, 45 to 100 per cent in countries of medium technical development, and almost the double of domestic inputs in Spain.

Despite the obvious advantages of buying foreign intellectual products, in Hungary the ratio of imported foreign licences and know-how is extremely low within inputs into technical development, in 1975 it was 7.5 per cent. The National Board of Technical Development investigated in 1971 the connection between the level of economic development, the domestic R & D basis and the imports of licences and know-how for 12 countries. The analysis unambiguously showed that Hungary's participation in the international turnover of licences is much smaller than what would be justified by its level of economic development.

Similar data were found by the Economic Commission for Europe stating that in 1973 Hungary spent \$ 3.6 million while Czechoslovakia spent \$ 47.8 million on licences. Czechoslovakia, with approximatively the same level of economic development and performance, thus spent more than ten times as much as Hungary on importing licences.

Development requirements of industrial branches and the proportion of purchased licences

In the traditional classification of technical development there are two fundamental trends of development: development of production and of products. Under the circumstances of rapid technical development these two forms are scarcely distinct, in most cases the replacement of a product is coupled with the modernization of technology. Evaluation according to these categories is made difficult also by the problem where the means of production belong to. Namely, the new, advanced machines and equipment appear as products in the engineering industry while in the branches utilizing them they are instruments of technological modernization. According to a survey made in the US business sector 87 per cent of the R & D costs serves the replacement of products and 13 per cent the improvement of technologies. About 75 per cent of the R & D costs,

however, emerged in the branches producing capital goods, consequently some 80 per cent of the expenditure ultimately helped improving the production technology. In Hungary 42 per cent of the R & D funds served product development, 24 per cent served technological development, and 62 per cent of the development costs was recorded in the engineering industry.

On annual average 70 to 80 per cent of industrial R & D expenditures are covered in Hungary from the technical development funds formed in the enterprises. The products after the sales of which such technical development funds may be formed are specified precisely in the relevant rules, and it is also stated what percentage of the sales receipts can be used for this purpose. The rates are extremely differentiated, and were formulated primarily with a view to the research requirements of the given commodity group. The average rate of the technical development fund relative to the sales receipts is more than 3 per cent, but in the telecommunication and vacuum engineering industries it is nearly 6 per cent, and in precision engineering about 7 per cent, in accordance with the products' development requirements. This rate is over 2 per cent in the chemical industry while in other industries it moves only around half a per cent.

Thus, the concentration of this activity is well illustrated also by the sectoral proportions of the technical development funds. The majority and a steadily growing proportion of the technical development funds is formed in the engineering and the chemical industries which are considered to be progressive branches, and which, by satisfying their "own research requirements", enhance technical progress in almost every field of the economy.

The engineering and the chemical industries produce a wide range of products, the applied technologies are of a great variety, calling for enhanced imports of intellectual products. However, the share of technical knowledge acquired in the form of licences and know-how is far less than would be justified, similarly to the proportions characteristic of the entire industry. In the engineering industry till very recently about 8 per cent of the R & D costs have been spent on purchasing licences, while the West European countries with advanced engineering industries use about 30 to 40 per cent of their development expenditures for obtaining foreign licences and know-how. The share of these expenses increased only by a few per cents in the 70's and the rate was strongly fluctuating by years.

In the *chemical industry* the share of licence imports from the development expenditures is even less than in the engineering industry, ranging from 2 to 5 per cent between 1971–1975.

In the *light industry* the imports of intellectual products speeded up between 1974 and 1975, and the *food industry* attained an outstandingly high rate in 1974 with a 15.4 per cent share in research expenditures. Nevertheless, this latter result should be analysed while bearing in mind that the food industry is a branch with small research requirements, where the replacement of products is slow, and technological research passes more and more to the engineering industry, thus the amount of per unit R & D inputs is much less than the average.

The imports of industrial licences in fact commenced in Hungary in 1969, and the impact of the first purchases on production showed in 1971–1972 for the first time. The amounts spent on purchases were 17 million foreign exchange forints in 1970 and 79

Table 3
*Proportion of licence purchase costs relative to total
 R & D costs in Hungary*

Industries	1971	1972	1973	1974	1975
Mining	0.4	—	1.5	1.1	0.8
Metallurgy	2.6	16.0	13.8	12.2	10.6
Engineering industry	8.4	6.7	12.2	10.6	8.5
Of which:					
Production of machines and equipment	8.9	9.9	9.8	19.7	10.3
Production of transport equipment	8.9	7.4	6.9	5.5	9.7
Electrical machinery and equipment	4.3	4.7	15.4	9.1	7.0
Telecommunication and vacuum engineering industry	1.0	3.6	14.6	6.7	6.4
Precision engineering	19.6	4.5	14.0	10.2	9.2
Metal mass products ind.	6.2	15.3	9.6	14.7	11.8
Building material industry	—	0.9	10.2	15.0	6.3
Chemical industry	2.3	3.9	2.7	2.7	5.2
Of which:					
Production of basic organic and inorganic chemicals	2.4	1.5	2.1	2.4	6.2
Crude oil refining	1.1	4.9	—	—	—
Pharmaceutical industry	1.1	0.7	0.0	0.4	3.4
Paints and dyes industry	—	10.8	8.6	8.6	7.2
Rubber industry	12.5	26.5	21.7	11.0	19.5
Plastics industry	2.7	10.1	2.3	7.3	1.9
Average of heavy industry	6.1	6.3	9.7	8.6	7.4
Average of light industry	0.1	0.7	2.2	6.0	8.1
Average of food industry	2.9	7.7	5.1	15.4	8.5
State and cooperative industry combined	5.8	6.2	9.3	8.8	7.5

million in 1972, and most of that was utilized in industry. The number of licences implemented in industry was 168 in 1972, 193 in 1973, then, after a year of stagnation, it increased considerably, to 249, in 1975.

Distribution of the adopted foreign intellectual products by branches is matching the branches' research requirements. The biggest importer of intellectual products is the engineering industry which adopted 145 licences in 1975, almost two-thirds of the foreign patents and know-how introduced in the entire industry. Machines and equipment production adopted an outstanding number of licences [42] while distribution among the other branches of the engineering industry was rather balanced.

Also the chemical industry relies increasingly on international research results; till 1975 it adopted and introduced 61 licences. More than half of these [32] are used in the

Table 4

*Sales receipts from products manufactured under licence
as percentage of total sales in Hungary*

Industries	1972	1973	1974	1975
Mining	0.0	—	0.1	0.1
Metallurgy	0.3	0.4	0.4	0.8
Engineering industry	4.1	5.7	7.7	8.8
Of which:				
Production of machines and equipment	4.0	4.9	5.7	6.9
Production of vehicles	5.3	6.2	10.1	11.7
Production of electrical machines and equipment	4.0	6.4	5.6	6.5
Telecommunication and vacuum engineering industry	4.6	8.0	8.9	12.5
Precision engineering	4.3	7.5	9.1	8.3
Metal mass products ind.	1.1	2.2	3.4	4.2
Building material industry	0.7	0.8	1.1	1.0
Chemical industry	3.2	5.2	6.1	5.9
Of which:				
Production of basic organic and inorganic chemicals	1.8	3.1	5.3	3.9
Crude oil refining industry	0.3	0.5	0.6	0.7
Pharmaceutical industry	3.4	4.5	6.2	8.4
Paints and dyes industry	0.5	0.7	0.6	0.6
Household chemicals and cosmetics production	3.6	7.4	9.8	10.1
Rubber industry	20.3	36.5	33.2	34.3
Plastic processing industry	0.6	1.4	3.0	4.1
Heavy industry	2.5	3.7	4.8	5.4
Light industry	0.2	0.3	0.5	1.0
Food industry	0.6	0.9	1.0	1.0
State and cooperative industry combined	1.7	2.5	3.3	3.7

pharmaceutical industry. The organic and inorganic basic chemicals production, as well as the plastic processing industry are important users as well.

In the other industrial branches the role of licences was smaller in 1975, the foreign licences or know-how numbered 18 in the light industry, 4 in the food industry, and there was only 1 in mining.

The role of licences in industrial production

An analysis of the international turnover of intellectual products provides a good orientation also for the development and shaping of the Hungarian licence policy in a number of fields. The experiences of countries pursuing deliberate and active licence policies unequivocally show that ideas regarding the adaptation of foreign technical

results must be developed in close harmony with the structural policy and research policy of the economy. First of all the industries or production branches are to be identified which are the most important fields of the economy and which are expected to attain the top international level. In these fields development must rely fundamentally on the domestic research basis, the purchase of licences cannot be but a provisional solution; in part for the purpose of launching development from a higher technical basis, and, in part, these might have a role in eliminating backwardnesses, if any, in some less important areas. The grounds whereupon the use of foreign licences can be built have to be attained through domestic research work in each case. Also the form and depth of cooperation with the licence seller is partly a function of the domestic research basis. Obviously, less technical assistance is required with an advanced research and industrial background.

In other, non-priority branches of the economy, for small countries the expedient form of development is only the so-called "keep pace" or "follow-up" type, in these fields intellectual imports might be the main instrument of progress.

Sweden is outstanding among the small countries with its extremely determined and at the same time successful licence policy; foreign licence or know-how is seldom bought for direct industrial implementation. In the overwhelming majority of cases the foreign licence is the basis of development, and on starting industrial production an improved version is applied in production. The earlier unfavourable experience of Poland illustrates the other aspect of the importance of the relation between licence imports and domestic research. In his paper about the results of licence imports in Poland Z. Zytomirski [12] reports that parallelly with buying licences the enterprises did not provide for further improvement, for new structural, technological and organizational solutions, and the scientific research basis was not adequately prepared for performing tasks that could guarantee further technical progress. After termination of the licence agreements, the enterprises either went on manufacturing the technically outdated products or applied for permission to acquire a new licence.

In Czechoslovakia, having realized the close connection between economic policy and licence imports, an overall program was drafted in which technical development, licence imports, investments, production and therein industrial development targets, foreign trade plans and scientific-technical policy are interrelated. The planning of licence imports and exports is done also in the German Democratic Republic within the framework of planning the scientific-technical as well as the foreign trade targets. The direct and indirect relations between the economic branches are considered in deciding about licence deals and in formulating the content of the licence agreement. Licence turnover is under central state control, and the interest of the national economy is decisive in decision-making.

In Hungary the government passed several resolutions to make the licence turnover livelier and to encourage the concentrated use of foreign intellectual products, but these have brought only modest results, as will be seen in details hereafter. Despite the latest developments, licences still play a relatively small role in industrial production and, considering the production and research capacities, the rate of their implementation is not satisfactory.

In Hungary the ratio of products manufactured under licences amounted in 1975 to only 3.7 per cent of all industrial products. Japan and the Federal Republic of Germany,

possessing bigger and much more advanced research-development bases than the Hungarian one, produce more than 10 per cent of their industrial output under licences. In Czechoslovakia the share of products manufactured under licences bought from abroad exceeded 6 per cent of all sales in 1972, while in the same year this was only 1.7 per cent in Hungary.

In Hungary the ratio of sales receipts of products manufactured under licences was more than double of the industrial average in engineering industry, it amounted to 8.8 per cent in 1975. It is characteristic of the dynamism of development that in the period examined the total sales of the engineering industry increased to 1.4 fold of the value in 1972, while that of the products manufactured under licences tripled.

In the chemical industry the ratio of products manufactured under licences increased in sales from 3.2 per cent in 1972 to 5.9 per cent in 1975. This is highly dispersed among industrial branches. Said rate is 8.4 in the pharmaceutical industry in most of the licences, 10.1 in the household chemicals and cosmetics industry using four licences, and 34.3 per cent in the rubber industry using one single licence (an Austrian one for tyres and tubes for cars and lorries).

According to both international and Hungarian experiences the products manufactured under licence are more exportable than the average. E.g. in Japan half of the electric engineering exports, more than one-third of metallurgical exports, and a quarter of chemical exports in 1960 were made up of products manufactured under licence. Though the Hungarian results are much more moderate, yet the tendency is favourable. The products manufactured under foreign licences and know-how are exported at a far higher than average rate by Hungarian industry too. However, their share is still rather low, in 1975 it amounted to only 6 per cent of export sales, this same rate was 11.5 per cent in the engineering and 7.2 per cent in the chemical industry.

Licence imports by enterprises are strongly motivated by export strivings. Considering the entire industry, in 1975 almost 40 per cent of the output of commodities produced under licence were sold abroad (at the same time 24 per cent of the total sales were exports).

With the small volume of Hungarian licence imports it would be important to concentrate purchases on programmes or products having a decisive bearing on the technical development of a sector or branch of production. The government passes several orders and resolutions about facilities to enterprises purchasing foreign intellectual products. In case of technical development in enterprises in the scope of central development programs or affecting several sectors, the National Board of Technical Development and the competent ministries may grant financial assistance for purchasing licences. The enterprises availed themselves of this opportunity only in a few cases, from among the central development programmes only three and seven licences, resp., were bought for the implementation of the road vehicle program and the computation technical program.

The concentration of licence imports is characterized from another aspect by the proportion and number of adopted licences and of the enterprises using them. The 249 live licences in 1975 were divided among 120 enterprises, i.e. each enterprise used two licences on average, and only a few enterprises use three or more foreign licences or know-how.

The use of foreign intellectual products added to a hardly detectable extent to the modernization and renewal of the commodity pattern of industry. In 1975 the number of products manufactured under licence was slightly above 300, engineering industry sharing with 174 and the chemical industry with 74 products. In 1975 the products manufactured under licence were 1.6 to 1.9 per cent if reckoned by number and 2.8 to 7.5 per cent if reckoned by sales, of the new commodities introduced in the engineering industry.

The object and term of accomplishment of licence developments

Categorization of foreign intellectual products is more complicated than the usual classification of technical developments, because legal points unavoidably interfere with the classification. Legally the licences are markedly distinct from know-how, the first ones being patented constructions or production technologies, while the latter do not enjoy legal protection but are confidential only between the contracting parties and concern, as a rule, production and organizational procedures.

However, from the point of view of East-West trade and industrial application, the more important one is another classification in which "pure" licence agreements and "package deals" are distinguished. In the latter the licence agreement is only one element of the deal.

The "pure" licence purchase is the less usual form in the CMEA countries, including Hungary; striving for quick industrial application the enterprises make efforts to buy also the machines and equipment necessary for implementation, and this may be completed with purchasing the know-how necessary for introduction into production. The seller of the licence often assists also in training the buyer's experts.

In the literature of the socialist countries, mainly of the Soviet Union, the preference for pure licence imports is gaining ground, because the domestic industrial and development basis is in possession of the technical culture required for rapid adaptation. On the other hand, it is assumed that in case of purchase without technological and other technical cooperation claims a probably more up-to-date licence is available more quickly. The Hungarian experiences of licence imports prove the contrary, the number of package deals and of those associated with cooperation is on the increase. The simple purchase of licence and know-how did not prove efficient enough, one of the reasons being that the seller bore no responsibility whatsoever regarding the implementation of the intellectual product.

In the cooperation relations the contracting parties often overtake unilateral or mutual exports. With counter-deliveries it is likely that the seller will export a product and the attached technical knowledge of the international standard. The demand for counter-deliveries arises also for currency reasons in most socialist countries, because in case of payment in products the balance of payments is not burdened by the intellectual import. On the other hand these latter cooperation relations imply the risk that the seller gives a so-called production licence, that is, a product or technology he perhaps intended to discontinue because it was not up-to-date enough. Consequently, the purchasing of the licence does not allow the attaining of the highest technical level, i.e., the "technological gap" is preserved by the technical transfer.

The purchasing of production licences and the demand for re-exports are often attached to division of production, i.e., within a range of products the production of equipments of different performance is divided and the contracting parties satisfy the total demand in their countries with mutual deliveries.

In the Hungarian practice there are several versions of licence imports and cooperation relations, the most common being the continuous transfer or exchange of further development results and experiences and the payment of licence fees *via* counter-deliveries. On the basis of agreements on cooperation in production the enterprise pays for the received construction and production licences in many cases by exporting the produced commodities. The Tisza Chemical Plant's Olefine Works is a good example for technological transfer through a turnkey factory coupled with the related technical knowledge and assistance.

In the period between 1972 and 1975 the pattern of licence imports developed favourably in Hungary. The number of licences coupled with production technologies, know-how, other technical assistance and cooperation relations increased at a faster than average rate, their share increased in the examined period from 17.9 per cent to 24.1 per cent, the ratio of know-how increased from 3.6 per cent to 8.8 per cent. The import of pure licences is more and more pushed into the background. In 1975, 25.7 per cent of the adopted foreign intellectual products concerned technological procedures, the ratio of product developments was 40.6 per cent and of know-how 9 per cent. The development carried out in the engineering industry by relying on foreign research results, assumed to be technological development for the total industry, has been overwhelming and approximates 80 per cent.

The sectoral pattern of the adopted intellectual products is marked by the specific features of the sectors. More than two-thirds of licences providing for product development are applied in the engineering industry, this type is bought only sporadically by other sectors. In the chemical industry the proportions are the reverse: about two-thirds of the licences introduced are technological processes or know-how, the share of package licences is 20 per cent, while the rate of purely product licences is 12 per cent. The application of technological or package licences is characteristic of metallurgy, light industry and food industry. Metallurgy usually buys the technological licences together with the equipment required for the technology.

The time of introducing and thereby utilizing the imported licences is affected considerably by the type of the agreement, namely, by the extent of technical assistance and cooperation. The time needed for introduction is affected also by the production, development and organizational background required for the utilization of the imported new scientific achievements. In the Hungarian industry the term of introduction of licences adopted in 1974–1975 was 16 months on average. In Czechoslovakia, where the technical level of industry is higher than in Hungary, the period needed for introduction is shorter, in 1972 more than half of the licences in the pharmaceutical, food and cosmetics industries were utilized within a year's time. Yugoslavian papers report terms of introduction ranging from 18 to 48 months. In Poland in the early 70's 36 per cent of the licences and production patents were introduced within a year.

The term of introduction varies very much by sectors, determined fundamentally by the technical endowments. A considerably longer than average term of introduction is

characteristic in Hungary of metallurgy, the building industry, and vehicle production (appr. 2 years). In the other engineering industrial branches the term of introduction approximates the industrial mean, while in light industry a much shorter than average time is needed by enterprises for the utilization of the technical novelties purchased from abroad.

Table 5

Distribution of the number of licences adopted in production in Hungary, according to the time elapsed until implementation

Time elapsed until introduction (years)	1972	1973	1974	1975
	per cent			
-1	31	54	52	51
1-2	40	26	27	28
2-3	21	16	13	13
3-	8	4	8	8
Total	100	100	100	100

In the period 1972-1975 the time spent on introducing licences diminished, and the ratio of licences and production patents introduced within a year's time increased from 31 per cent to 51 per cent.

Nevertheless, the ratio of licences introduced within a year was each year lagging behind the term of introduction contemplated at the time of purchase. Namely, in the year of concluding the contract the industrial enterprises generally provide for the implementation within a year of two-thirds of the licences.

The term of utilizing the licences is influenced also by the time spent on negotiations about the deals; the often lengthy negotiations cause considerable delays in the starting of industrial production. Several factors affect the time spent on the purchase unfavourably. The lack of enterprise experiences should be mentioned in the first place. The conclusion of the contracts is also retarded by the rather complicated legalization system of East-West technology transfers. The period of preparation should be used by the enterprises for market research, for obtaining the necessary informations from partners and to coordinate the forward and backward links emerging in the cooperation with the domestic partners regarding the introduction of the licence.

The time of utilizing the licences is calculated essentially from the date of implementation. The duration of utilization - its length perhaps limited also by the licence agreement - is usually 5 to 12 years. This naturally depends also on the given commodity group of the given branch.

The production volume providing the optimum results can be attained 2 or 3 years after implementation. This is supported by the fact that from among the products manufactured in 1975 under licence, the licences in use for 4 to 9 years amounted to 37 per cent, while their sales to 59 per cent. These same proportions were 27 and 8 per cent, resp., for licences in use for 1-2 years only.

Turnover of industrial licences

In the socialist and in most of the capitalist countries the balance of licences is of negative sign. The only exceptions are the United States, Switzerland, the United Kingdom and, lately, Japan. From the socialist countries the number of sold licences and know-how exceeded the number of those purchased in Czechoslovakia, but the revenue from sales amounted only to a quarter of the amount spent on purchases.

Table 6

Licence turnover of Hungary

Year	Import	Export Balance	
		million Forints	
1970	17.5	5.1	-12.4
1971	78.9	8.3	-70.6
1972	56.7	10.1	-46.6
1973	33.9	28.0	-5.9
1974	101.2	12.0	-89.2
1975	153.6	33.1	-120.5

The licence turnover of Hungary more than doubled between 1970 and 1975, while imports were each year a multiple of exports. In 1973 the imports of technical intellectual products fell back, with exports rising at the same time to threefold of the value in the year before, and thus the annual deficit shrank to a fraction of the previous period. In 1974–75 licence imports revived and were 5 to 9 times more than exports.

As mentioned above, the licence purchases of enterprises started to rise in the 70's. After 1972 the number of purchases stabilized, 35–45 licences and know-how were imported each year. Most of the licences and know-how were bought – in accordance with international experiences – by the engineering and chemical enterprises in Hungary too. In the examined period usually 20–30 licences were adopted by the engineering industry and 5–15 by the chemical industry annually. Within the chemical industry, the pharmaceutical industry is the biggest importer. The purchases of the light and food industries represent but a tiny fraction of the turnover.

Most of the licences applied in industry originate in Western countries. 94 per cent of the licences working in 1975 were bought from Western countries, nearly 30 per cent from the Federal Republic of Germany, and the licences and production patents imported from the United Kingdom, Switzerland, Austria, Belgium and the USA were also considerable.

Intellectual products of the socialist countries represent a growing proportion in the licence imports between 1972 and 1975. In 1975, 30 per cent of the licences were imported from socialist countries, most of them from the German Democratic Republic and from the Soviet Union.

The licence exports of industry represent a rather modest part in the Hungarian economy: between 1972 and 1975 the income from industrial licences and know-how

was hardly one-fifth of the import costs. In the four years examined only 38 licences were sold abroad, 37 of them by the heavy industry and one by the timber processing industry. Half of the licences sold were marketed by the chemical industry (mostly by the pharmaceutical industry), nearly a quarter by metallurgy, and slightly more than a fifth by the engineering industry.

Between 1972 and 1975, intellectual products were exported to 19 countries. Among the purchasers there were socialist countries, advanced capitalist countries and developing countries alike. The proportion of licence sales to the socialist and to the advanced capitalist countries is nearly the same, the tendency of the latter is, however, decreasing. The majority of licence exports to socialist countries went to the German Democratic Republic and the Soviet Union. In the third world Hungary has not established a durable market as yet, the licences and know-how offered for sale were bought each year by different countries.

It has been attempted to compare the Hungarian achievements in the use and turnover of foreign intellectual products with the international trends. In the evaluation of licence turnover, by necessity, the international trends are namely the standard and not the criterion of efficiency. The results and efficiency of the adaptation of licences are, namely, difficult to evaluate on macro-economic level. Varying introduction periods are involved by the adaptation of technical achievements of differing nature, and a direct relationship between costs and results cannot be stated in a reliable way. The efficiency of licence imports and their implementation are, in our opinion, enterprise categories. That is, the alternative of local research vs. import can be decided realistically only in knowledge of the concrete development conceptions, by comparing and weighing inputs against results.

The objective of this paper is merely to call attention, with a study based on statistical data, to the fact that in Hungary a broader utilization of the achievements of the international division of labour would be expedient in obtaining technical knowledge, furthermore, that the volume of imported licences and know-how is much less than would be justified by our production and research potentials. In industrial policy, in development projects assigned with the criterion of selectivity in mind, we ought to rely much more on the findings of foreign research work. A broader implementation of licences and know-how could accelerate elimination of our lag in productivity and also could enhance the supply of products exportable to any market.

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BOOK REVIEWS

Input-output techniques. Proceedings of the Second Hungarian Conference on Input-output Techniques. Budapest, 1976. Akadémiai Kiadó 409 p.

The conference took place between October 18–21 1971 at Siklós being jointly organized by several sections of the Hungarian Economic Association and the Statistical Committee of the Hungarian Academy of Sciences. (The publication furnishes no information on the exact date of the conference.) The first conference discussing the same subject was held in 1961 in Hungary, thus by collating the subject-matter of the two conferences one can assess the high rate of development in the past 10–12 years. This accomplishment, however, reflects indirectly the progress not only of economic statistics, but also of economic thinking and analysis, in profound methodological work and in the domestic application of mathematical and statistical methods.

Following the opening session the lectures of the conference were delivered under the headings:

- Statistical problems of the construction of input-output tables;
- Statistical problems of the application of input-output tables in planning;
- Some methodological problems of the application of input-output tables in economic analysis;
- Mathematical problems in the construction and application of input-output tables.

The papers are printed in the order in which they were given. After an opening address by József Nagy President of the Baranya County section of the Hungarian Economic Association, follow papers by István Huszár, Deputy Prime Minister, President of the National Planning Office, and Albert Rácz. The four chapters that follow contain the 35 lectures of the ensuing four sessions.

I. Huszár's address centres on the role of economic models in the preparation and better foundation of decisions and on the role of input-output tables in the statistical information system. It dwells on the role of input-output tables in the family of economic models, on their interrelation with econometric and programming models, or on the possibility of linking them. The paper sees the main trend of further development in the input-output tables being lent a dynamic character.

A. Rácz's paper treats of a similarly far-reaching complex of issues. On the one hand it offers a brief historical survey of experiments conducted in Hungary in the course of the past 15 years in the field of input-output tables, specially highlighting the activities of the Central Statistical Office. Of the many positive features of this work one should single out that the tables fit integrally into the economic information system and that they contributed much to the methodological progress of statistics. These tables proved suitable for analyzing income processes, price trends and creating price models. Regarding future tasks the report emphasizes the necessity of compiling dynamic and comparable tables.

R. Horváth presents a historical survey of input-output tables. The paper introduces us to the theoretical backgrounds of input-output tables, to economic thinking from the days of *Quesnay* up to now incorporated in them, with special regard to conformities and discrepancies between input-output tables and account balances and to the latest trends of development. By way of illustration he shows the applicability of this method in the planning of revolving assets.

Several papers discuss the data basis of input-output tables, the evaluation of the data, and the difficulties in compiling tables. The report by Mrs. Éva Koós discusses in detail how the problems having arisen during the compilation of the 1968 input-output tables (classification by

branches, cleaning of profiles, the accounting of waste and refuses, renewals, turnover taxes etc.) were managed. J. Kupcsik's lecture discusses the problems of valuation and prices. The problem emerges in several aspects: one concerning the selection of the price system (producer or consumer prices), the other concerning the comparability of input-output tables relating to different periods (repricing). The problems were discussed in relation to the 21 sector models elaborated for 1968 by the Central Statistical Office. Kamilla Lányi investigates the methodological problems (comprehensiveness, comparison of dimensions) of input-output tables given in natural units of measurement.

Understandably, reports and case-studies presenting a general analysis of branches are numerous. These reports primarily deal with special problems in the construction of the input-output tables of extra-industrial branches. They also discuss interrelations with the input-output tables compiled by the Central Statistical Office, and their integration into a consistent system. In Mrs. Zsuzsa Huszár's paper the above interrelations of the construction industry, in István Hajdú's and Mrs. Rózsa Szikszai's those of agriculture, in Péter Szerdahelyi's and Gábor Udovecz's those of the food processing industry are dealt with. The input-output tables of the metallurgical and engineering industries are examined by Zsigmond Kostyál, those of heavy industry by Ferenc Kiss. Péter Szikla analyzes the possibilities of a more pronounced consideration of the sphere of turnover in input-output tables and demonstrates a related procedure.

The introduction of an indicator-system showing the total share of economic sectors in production and distribution on a national economic level forms László Szabó's subject: how big is the contribution needed to bring about the net production of each sector on the national economic level in absolute and relative value; Tamás Iványi's lecture looks into the elaboration of cumulated wage, labour and fixed asset indicators and their long-term assessment.

Mária Augustinovic discusses the role of input-output tables in the synthesis of long-term planning. Input-output tables are safeguard of the consistency of differing information: they are built on uniform nomenclature and indicators. Macro-economic synthesis can often be warranted only by means of economic and mathematical models prepared in several variants. Andor Csepinszky gives a detailed account of the meth-

odological problems of the input-output calculations for 1972, which truly illustrates the new methods in the construction of input-output tables and shows the progress made in this domain. He stresses the necessity of the continuous construction of comparable tables and of the compilation of an internally communicating input-output tables family. The new input-output table embraces the sphere of non-material production and services; another novelty is that it handles agriculture in a more detailed breakdown. It shows the system of input-output tables for 1972 along with the desaggregation of the central input-output table broken down according to the 91 organizational units and 102 activities.

György Szokolczai's subject is the role of input-output tables in financial and price planning. This, first of all, presupposes a method combining input-output tables based on principles of activity and organization and a thorough knowledge of monetary processes (price support, direct, indirect taxes). By means of them calculation on a uniform price basis and comparability over time can be attempted. Ervin Frigyes and Mrs. Nóra Simon introduce a mathematical method facilitating the breakdown of dynamic changes into components and indicating the extent and direction of structural changes.

The analysis of industrial efficiency is in itself an issue of high importance, but especially so from the aspect of the research of mechanisms and economic management. This subject is dealt with by Mrs. Vera Nyitrai. Even the definition of efficiency itself is not free from difficulties. In the author's opinion the concept can be approached with several indices on different levels, and the choice of indices is partly influenced by economico-political targets. In the analysis of industrial efficiency the author applies various methods, compares industrial branches, and makes use of the model for international comparisons. In efficiency analysis different model variants may play a certain role.

Closely linked to the previous subject is the application of input-output tables in the analysis of the efficiency of foreign trade. This is dealt with in three papers. Aladár Szabó recommends input-output tables calculated at world-market prices, which assert the value judgements of foreign markets; he surveys research work in this field in Hungary and examines the production shares of the branches. Similarly, József Fáy advocates input-output tables calculated at dollar or

rouble world market prices. Taken in itself, this does not suffice for appraising the efficiency of individual branches, for this it is necessary to compare their relative net incomes. Tamás Szabó examines the efficiency of the exports of metallurgical and engineering industries relying on the detailed input-output table of 1968, which contains 81 engineering and 14 metallurgical product groups.

A particularly swift progress was observed in the sixties in the application of input-output tables in forecasting and planning, so it is not by chance that several of papers centre on this issue.

Miklós Simán lays stress on the role of input-output tables as a framework guaranteeing the consistency of forecasts for specific problems. Péter Glattfelder and Pál Vácz discuss the theory of the RAS method: the method as a tool for forecasting assumes an exponential time-function of the technological coefficients, the authors attempt to generalize and extend it to cases where the coefficients show a linear change through time, and they also introduce its algorithm. László Mihályffy discusses likewise a method ensuring consistency of forecasts regarding certain elements of the input-output table. The introduced algorithm is valid for the special case when, with consistency conditions given, the sum total of the elements in each individual block of the matrix is determined.

The main subject of Lajos Cserba's paper is the implications of input-output tables for planning. The fundamental task of national economic planning consists in the simultaneous and consistent forecast of the whole reproduction process, the activity of the individual branches, income and monetary processes. It outlines the role of national economic balances in this process, most of all in the preparation of investment and development decisions. It surveys the fields where planning work should be improved and points out the necessity of a joint application of several methods in planning. Ferenc Kiss deals with the application of the input-output model for planning in heavy industry. The activity of heavy industry can be examined broken down to enterprises, products and production technologies: he thoroughly investigates the role of the latter and the possibilities of linking it to the global national economic balance. A methodological paper by Ede Theiss shows the possibility and requirements of further improvement in input-output tables in conformity with the objectives of national economic planning. One of

the main trends of further development is the elaboration of dynamic input-output tables, which are also a tool for balanced economic growth and for elaborating optimal economic plans. The study outlines the large-scale projects and models of the Netherlands, the Soviet Union, Norway and France. It affirms that what is needed is the combination of input-output tables with econometric and decision (programming) models. The problem of aggregation plays a major role in the solution of the task; here the method of successive approximation has to be applied. Series of stochastic macro-models must be constructed; disaggregation must be increased by incorporating sub-models. By means of them the economic optimum can be approached with higher probability.

The methodological approach of Katalin Hulyák is new insofar as it connects the econometric model with input-output models. Continuing the experiments of the Econometric Laboratory of the Central Statistical Office concerning Model-M series she constructed an econometric model (Model M-4) which contains a stochastic block (16 equations) and a block of input-output table (15 equations). The stochastic block forms an identified system in itself. The marked methodological significance of the experiment lies in the fact that by means of the known input-output relationships the model can be used for making forecasts of the gross production and the intersectoral relations.

György Meszéna and Mrs. Nóra Simon's paper, which presents more efficient models of forecasting input-output coefficients is also of methodological character. For this purpose they investigated the occurrence of auto-regressivity in the time series of coefficients separable from the trend for the period 1959–1968, and considering this they made ex post forecasts the results of which they compared with the results of the RAS method.

Other papers discuss the application of input-output tables in international comparisons. Mrs. Klára Filló reports on the experiments and difficulties of comparing the economic structure of CMEA countries (level of aggregation, pricing) and then compares with the aid of the input-output table the characteristics of the Hungarian and Bulgarian national economy. György Szepesi and Béla Székely deal with a problem of similar nature inasmuch as they give an account of the preliminary results and methods of research work matching the economic structure and the most

characteristic features of the EEC countries. The comparison was made on the basis of standardized input-output tables. An attempt was also made to rank countries as to various features.

In addition to national economic and sectoral analysis the input-output method is also suitable for investigating plants and regions as has been confirmed by recent results. Lóránd Nagy examined the input-output tables relating to socialist farming units relying on the data of the Lenin farming cooperative (Románd) for the year 1970, breaking down the activity of the cooperative into 65 branches. Others used the method for regional analysis: Tamás Bihaly uses his interregional transportation model for forecasts (or normative planning) of transport activities serving the purposes of regional planning. The purpose of the model is to minimize necessary transport, and it also presents a basis for regional development and the location of new plants. Ferenc Kiss reports on an input-output model for the industrial area of Kazincbarcika for the year 1965, in two variants, mentioning the interrelations between the regional and central model. Tibor Kovács, Andor Csepinszky and Zoltán Novák prepared a regional input-output table for Vas county. Its specific feature is that branches playing a major role in the county are handled separately, the rest as an aggregate. The regional input-output table was originally designed as a methodological experiment, and it justified the applicability of the method.

Finally, two of the studies investigate the applicability of the method beyond the economic field in the strict sense. Rudolf Andorka and János Illés enlarge the method into a model of social and demographic relations which is capable of analyzing intergenerational and intra-generational mobility. Going beyond this they endeavour to elaborate a comprehensive socio-statistical system. József Horváth shows a model which, on the pattern of dynamic input-output models, tries to register manpower employed in the reproduction process, aiming at the utilization of the model in long-term planning.

This volume comprises an impressive amount of material, and, what is especially welcome, beside the case studies it includes a wide variety of timely theoretical works. It is to be regretted that there was no way of presenting the debates and contributions of the conference at least in outline. Andor Csepinszky merits praise for the careful editing, György Hajdú and Jenő Rácz deserve credit for the fluent and expert translation. A

merit of the editing is the 40-page bibliography including all the domestic publications on this subject between 1957–1970 (about 200 books and papers); they are all introduced and critically appraised.

The book offers proof of Hungarian achievements in the application of the practice and method of input-output tables. It truly reflects the results attained since the last conference held ten years ago. But it is common knowledge that in the course of time information becomes obsolete. This requires rapidity in the publication not only of quantitative data but also of scientific information. Regarding this the period of five years between the conference and publication is rather long.

In the meanwhile research has yielded new results, and the new Hungarian input-output table was born. At the compilation of the input-output table for 1972 the Central Statistical Office made ample use of the methodological and economic considerations expressed at the 1971 conference either during the lectures or in the debates. The results of the 1972 input-output table computations in terms of material and non-material concepts, organizational and activity delimitations, on two levels of aggregation (90–100 and 21 sectors) in A and B variants depending on how import is considered, began to appear in Hungarian early in 1975. (The three volumes: Input-output table 1972, in organizational breakdown. Budapest, 1975. Central Statistical Office. 369 p.; Input-output table 1972. Budapest, 1975. Central Statistical Office. 581 p. Input-output table 1972. Export, import calculations. Budapest, 1976. Central Statistical Office. 160 p.)

zs. NYÁRY

ANCHISHKIN, I.: Prognostication of the growth of the socialist economy. (*Прогнозирование роста социалистической экономики.*) Москва, 1973. Издательство Экономика. 293 p.

A. I. Anchishkin's book gives an analysis of economic growth in the Soviet Union between 1950–1970, and also contains forecasts for 5–10 years.

From among its three parts of similar volume the first one is verbal and much more general

than the two others presenting the methods and empirical examinations. Its task is the theoretical foundation of the latter. The most important is Chapter Two dealing with the main theses of the Marxist theory on the factors of production. The best founded and elaborated part is Part Two entitled "Physical volume and dynamics of production and production resources." Its "genre" is economic statistics, moreover, at a high level. The author almost completely exhausts the possibilities delimited by the genre and the data available. Contrary to this, Part Three, the modelling of economic growth with the aid of production functions exhausts the possibilities of its genre, i.e. econometrics, by no means, although it is full of ideas. Several concepts of Anchishkin get stuck at a certain level, namely, at that of "sketching" models or even partial models as well as "demonstrative computations". Smaller or more extensive models follow each other sparkingly and enjoyably, but the analysis relying on them is sometimes formal. Besides, a serious deficiency of Anchishkin's empirical work lies in that the confidence intervals of estimated parameters are not indicated.

However, the work as a whole compensates the reader for the deficiencies to be found in some parts: the book was written by an open-minded economist and is abounding not only in smaller or more extensive models, but also in clever and relevant ideas, which are often put down by the author only by the way. The wide range of these thoughts can be illustrated by some headings as e.g. criteria of the evaluation of economic growth; relations between equilibrium and economic growth; the role of market and money relations in the establishment of equilibrium; general principles of mathematical modelling, steps of modelling work; the reproduction process of productive assets and labour; economic potential of productive fixed assets and labour; optimum distribution of the social final product; tasks to be solved in growth analysis. The diversity of subjects does not upset the structure of the book anywhere, Anchishkin leads us along his concept on economic growth very consequently.

I begin the review and evaluation of the book by the sharp criticism that its theoretical statements do not make out a theory of growth. My statement is condemning only seemingly, since there exists even at present only one growth theory of the socialist economy that can be regarded systematic, namely, that of *Kalecki*. The

famous Polish economist published the best known systematization of his growth conceptions in 1963. *Kalecki* had followers in several socialist countries already in the early 1960s who made successful attempts to describe the growth of their own economies with the aid of *Kalecki's* model system (e.g. *Goldmann's* and *Kouba's* book on the growth of the Czechoslovakian economy published in 1967). Some years later, in the second half of the 1960s another school began to develop – and Anchishkin also belongs here – whose adherents tried to apply the traditional production theory for the analysis of growth in particular socialist economies and practically worked with production functions. However, this growth school has no systematic theoretical foundation up to now, consequently, in this school no such basic work can be found as that of *Kalecki*. In the "second wave of growth analysis" theoretical and empirical works did not even separate, and economists to be ranked here, thus also Anchishkin, simultaneously deal with verbal and modelling theoretical foundation as well as with empirical researches. Beside its advantages – their working method results in a narrowing of the subject of economic growth. Data series on production, labour and productive assets obtain an exaggerated role in analysis, thus ousting other fields.

Anchishkin's growth theory is very simple. Its essence is the input-output approach taken over from the traditional production theory. Economic growth is simplified here to the expansion of social production. *Part One* of the book begins with the characteristics of the basic elements of economic growth, for which purpose Anchishkin outlines the scheme of social production at first (Anchishkin's first figure). By the end of the analysis this will grow into a scheme of economic growth (Anchishkin's third figure) whose centre is the interaction of the production process and the social final product, i.e.: the social final product can be obtained by the summarization of the results of production processes and its distribution reacts on the production processes. Since the author considers the traditional input-output scheme, i.e. the factors of production → product scheme adequate for the production processes, it is not surprising when he states as a conclusion of the first chapter that the theoretical foundation of the analysis of the process of economic growth based on various factors is of decisive importance. Factors of growth are, in his opinion, the aggregates of factors of pro-

duction: the amount of work and productive assets used up by the national economy in the production process. This is followed — as has already been mentioned — by Chapter Two entitled "Main theses of the Marxist theory on the factors of production" which is aimed at the afore-mentioned theoretical foundation of decisive importance.

It is proved in this chapter that already Marx had held the view according to which means of production and living labour appear as physical masses in their quality as sources of material wealth (values in use). Beside the denominations factor of the working process, product-forming element, product-former, materially different production elements Marx had also used the expression factors of production in a sense identical to the former. The Marxian analysis revealed both sides of social production and dealt also with the value in use side beside the value side. Going on we find that András Bródy's book* already proved the fact that as Anchishkin states "the two sides of reproduction are realized in a uniform process, but as two different dimensions of the same". [p. 35] Anchishkin expounds correct theses on the importance of the material side of reproduction in Chapter Two. Nevertheless, even after having read it we cannot think that the growth theory based on the Marxist theory of production factors has been established.

Namely, a growth theory can be obtained from production theory only by an aggregation "leap", by extending the particularities of the individual production process to the entire national economy. This leap is natural for Anchishkin, since as it can be seen from his schemes, he conceives national economic production as mechanical sum of individual production processes. But it is not sure that the reader will believe the statement that everything what has significance at the level of individual production process (it is not by chance that the majority of Anchishkin's quotations from Marx refer to this level) will have significance also for the entire national economy. In *Part Two* of his book Anchishkin begins to examine the physical mass, i.e. the volume of national economic production, labour and productive assets. He wishes to consider economic growth only from the material aspect, as a process producing value in use. True,

the merely material-technological connections between factors of production and the product are of great importance for the micro-economic theory of production (although even this theory cannot be confined to studying technological connections alone), but the long-term growth of the entire economy cannot be conceived in an analogue way to the production process. One of the advantages of Kalecki's school is its not doing so and that it does not neglect the institutional sphere of the economy, the way in which individual processes are interlinked, nor economic control and management. While Anchishkin carefully measures and analyzes volumes summarized at the level of the national economy, little is learnt about the real motives of economic growth.

Part Two of the book gives a statistics of economic growth, and that in strict harmony with the growth scheme expounded in *Part One*. Its central expression — as has already been mentioned — is volume. The author tries to measure the output of production and resources of production at the level of the entire national economy in their physical volume. He recognizes as components of yearly production only inputs that can be measured physically and valued at constant prices. As a result he obtains system of balances reflecting the material side of national economic production whose main feature is that the notion of depreciation charged with value is banned and instead the figures of scrapping, replacement and putting into operation computed at constant prices are utilized. He calls the indicator used for the comprehensive characterization of economic growth social final product, this is the usual value added indicator, but viewed from the material side. The details of its structure and of the method of computation for the Soviet economy are one of the best elaborated parts of the book. The same can be said also of those sections where the author analyzes in detail the time series of social final product. His aim is: "To determine the laws (trends) of growth in time as well as its parameters and the degree of stability and evenness." [p. 103]

Beside working with several usual functions that can be made linear the author uses also generalized exponential as well as logistic functions, i.e. two types of functions which cannot be made linear. From his analysis we learn that Soviet development was not even, because polynomials of second and third degree, respectively, fit better than the exponential trend (postulating

*"Proportions, prices and planning." Budapest—Amsterdam, 1970. Publishing House of the HAS — North Holland Publishing Co.

a permanent growth rate) and the generalized exponential as well as logistic functions even better than the polynomials. Anchishkin states: "The results obtained indicate that in our country neither the analysis nor the prognostication of social production should be started from the conception that production might increase at an even rate for a relatively longer period." [p. 112.] From the data a moderate slowing down can be concluded, whose measure is 0.2, then 0.1 point from one five-year period to another (beginning with 1971!) if computed with a polynomial of third degree. Namely, a third-degree polynomial trend indicates a yearly growth rate of 6.75 per cent for the period 1971–1975, 6.55 per cent for 1976–1980 and 6.45 per cent for 1981–1986. Actually a yearly average growth rate of about 6 per cent was realized in the Soviet economy between 1971 and 1975 as compared to the previous five-year period. It is a pity, that the author does not submit growth rates computed from general exponential and logistic trends. Finally, we should not forget that an uneven (non-exponential) growth does not mean that growth was not relatively free from fluctuations and stable as compared to the non-exponential trend. Anchishkin indicates also the degree of stability to each trend.

Analysis of the growth of productive assets and labour is not limited in the book to the examination of the time series of their volume, but also a systematic investigation of investment, demographical and labour-forming processes is carried out. Anchishkin describes the reproduction of productive fixed assets, productive circulating assets and labour, respectively, in separate models, each of which are very similar.

The central parameter of the reproduction model of productive fixed assets is the investment lag meaning the time passing between the starting of investments in fixed assets and the putting into operation of these fixed assets. This is the only indicator of Anchishkin's model that is not included in the traditional statistical and planning computations. With a rough simplification of the model (supposing even growth) this value was 1.2 years in the Soviet economy in the decade between 1960–1970. This is the average investment lag, within which the construction lag amounts to 2.5 years in the productive sphere. Computations have shown that both types of lags show an unambiguously increasing trend. In order to illustrate the decisive importance of the investment lag the author computes the expected

volume of productive fixed assets to be put into operation and of the stock of unfinished investment by 1980 also with values of 0.6 years and 1.8 years, respectively, beside the real 1.2 years-value. In the case of circulating assets he computes the increment of production stocks in the same way, supposing various values of the velocity of circulation. Examination of productive assets is completed by the evaluation of the economic potential of productive fixed assets. Anchishkin determines the average technical level of productive fixed assets by means of a vintage model. The main parameters of the model are the following: rate of putting into operation of new investments, growth rate of the technical level from one year to another, average lifetime of fixed assets, the period covered by the model. It can be shown in the model that the criteria of maximization of average technical level and of the maximum economic potential of productive assets are contradictory. (By this statement the conviction of the author is also verified, that the maximum efficiency of production is not equivalent to the maximum output of products.) With the parameters fixed at some reasonable value — except for the lifetime — the former criterion is realized with a lifetime of 9–10 years of fixed assets and the latter with that of 24–25 years, according to the model. The average real time of operation of 17–18 years developed in the Soviet economy is between these two values. The author reviews in detail the economic barriers which lead to a compromise between the two criteria.

There are no distinguished parameters in the reproduction model of labour. Namely, in the author's opinion the volume and economic potential of labour resources are determined mostly by objective processes exogenous from the point of view of economic growth, as against productive assets. Anchishkin deduces the number of those employed in material production from the following data: yearly average population, birth rate, population of working age, proportion of those alive at the average age of beginning work, average age of those taking a first job, average of years spent in work, proportion of those employed as compared to the potential labour force, proportion of those employed in material production within total employment. The author analyzes in detail the long-term, past and expected development of these variables and finally computes the yearly average growth rate of employment in material production with dif-

ferent probable values of these variables. An examination of labour resources is concluded, similarly to that of productive assets, with their economic evaluation. Anchishkin computes qualification potential and average qualification level and discusses the structure of qualification potential and its deterioration process, too.

Part Three of the book is aimed at connecting the increase of social production and its factors by means of production functions. Unfortunately, Anchishkin's good ideas are almost lost among the formal deductions here. Such is, for example, the distinction between analytical and prognostical production functions, the former used for an analysis of the past and the latter serving for forecasting the future. This is pointed out by the author only at one place, (pp. 209–210), but even here only in principle, and he does not utilize the essence of his idea in later computations, namely, that prognostical production functions are more stochastic than the analytical ones. The time horizon of forecasts can be extended if "fine" enough quantitative methods are used for determining the parameters and their changing regularities, Anchishkin states, but he does not utilize these methods himself. This is no coincidence. He does not believe in the "refinement" of production functions, but expects progress from the development of other fields of prognostication. It is probable that also this freedom from illusions is a reason why production function as a regression model is not discussed in the book, nor are the various types of production functions reviewed. Anchishkin uses the special cases of a certain Cobb-Douglas function, a function where most possible changes in time can be found. Its formula is the following:

$$Y_t = A(t) K_t^{\alpha(t)} L_t^{\beta(t)}$$

or, supposing an even growth, stated for growth rates:

$$y = a(t) + \alpha(t)k + \beta(t)l.$$

In the overwhelming majority of cases the author uses this latter formula. Thus he can draw conclusions only for the entire period of 1950–1970, since the growth of production and labour, respectively, was not even. It is disturbing that Anchishkin does not tell this straight, although he reasons according to it. Where he needs also the analysis of changes in time, he uses the method of moving averages.

Great emphasis is laid in the book on the partial and combined efficiency indicators of factors, average and marginal efficiency values are computed for each production function. For example, his computations made with the one-factor functions $Y_t = A \cdot K_t^\alpha$ and $Y_t = A \cdot L_t^\beta$ on the basis of moving averages covering ten years are remarkable. Here α decreases at first (from 1.019 to 0.715), then increases (from 0.715 to 0.815) while β increases at first (from 4.03 to 8.09), then decreases (from 8.09 to 4.27). These results support the conclusion to be drawn also from other computations of the author, according to which the efficiency of assets had increased until 1959 and then decreased at an accelerating rate until 1965–66. Since then the decrease has been going on at a slower rate with a trend towards the stabilization of efficiency. Furthermore, labour productivity showed a monotonic increase with an accelerating trend in the first half of the period examined and with a slowing one in its second half. Anchishkin's view, according to which "it may be supposed even on the basis of a rough examination that the efficiency of assets can be ranked among the efficiency indicators with cyclical characteristics, but, this can hardly be assessed on the basis of a 20 year-period. . ." [p. 236] is also interesting.

From the two factor analyses the modelling of combined economic efficiency should be pointed out. For this the author transforms the production function $Y_t = A \cdot K_t^\alpha \cdot L_t^\beta$ as follows:

$$\begin{aligned} Y_t &= A \cdot (K_t^\mu \cdot L_t^{1-\mu})^\nu \\ &= A \cdot K_t^\mu \cdot L_t^{1-\mu} \cdot \Lambda_t. \end{aligned}$$

If all the variables increase exponentially and the growth rate of Λ_t is λ , then the above formula can be written also with yearly growth rates:

$$y = \lambda + a + \mu k + (1 - \mu)l$$

According to Anchishkin production increases in a purely extensive way if $\alpha + \beta = 1$, when $\nu = 1$ and $\Lambda_t = 1$; but if $\alpha + \beta > 1$, i.e. $\nu > 1$ and $\Lambda_t > 1$, this means the existence of intensive resources of economic growth. Thus the increase of production can be divided into extensive and intensive parts, respectively; the proportion of the extensive resources of growth will be: $[\mu k + (1 - \mu)l]y$, and that of the intensive ones: λ/y , the proportion of non-identified factors of

growth a/y . The first two parts can be further divided into two parts each according to whether growth is connected with the increase of productive assets or of labour, respectively. By using this method the following conclusions can be drawn concerning the characteristics of Soviet economic growth in the last two decades:

"1. The most important source of economic growth was the increase of productive assets; nearly three fourths (72.4 per cent) of the increment of the social final product could be attributed to this factor, while the share of increasing labour inputs amounted to about one fourth (24 per cent).

3. More than half of the increment of the final product (51.7 per cent) resulted from extensive sources, while less than half (44.7 per cent) from intensive sources.

3. Non-identified factors of growth did not considerably contribute to the increase of production (3.6 per cent)." [p. 253.]

The intensive part of growth can be separated not only with the parameter $\alpha + \beta$, i.e. the volume elasticity (this method has been applied by Judit Rimler to Hungarian growth), but also with the parameter A_t . (In Hungary György Szakolczai and his team made such computations). Both methods are so much formal that it can hardly be decided which is the better. It can be accepted somehow that the increase of $\alpha + \beta$ means the strengthening of the intensive sources of growth (or, as Rimler states: that of the qualitative effects of factors) – while the increase of A_t is perhaps less unambiguous because of its residual character –, this is more or less verified by common sense and various international computations with production functions. However, it is difficult to accept why precisely $\alpha + \beta = 1$ is the dividing line between extensive and intensive growth. Intensification (the entering of quality) by definition begins if $\alpha + \beta$ exceeds 1, and these notions are not discussed but within the framework of production functions. I think convincing arguments could be advanced that the dividing line between extensive and intensive growth can be found at various $\alpha + \beta$ values in different branches of the economy, it is not sure therefore that separating them at $\alpha + \beta = 1$ at national economic level is correct.

As far as forecasting is concerned, Anchishkin computes with the above model that with $l = 0$ and $k = 6.0$ $\lambda = 3.9$, i.e. a yearly 3.9 per cent increase of combined efficiency is necessary to achieve a yearly 6 per cent even growth of the

social final product ($y = 6.0$). This means that the intensification level of economic growth should be raised to 65 per cent ($\lambda : y = 3.9 : 6.0 = 0.65$). This task is then divided into the necessary increase of the efficiency of labour and productive asset inputs, respectively. Goldmann's and Kouba's conclusion was similar with the Kalecki-model from a certain point of view. If we wish to develop further on, then the value of certain variables should be radically changed – this is what growth theory says at the critical phases of growth. Nowadays, the exhaustion of labour resources causes the main difficulties. The theory of socialist economic growth based on factors of production draws attention to these difficulties, but without any contribution to their solution. In my opinion, it can be imagined that the stagnation or decrease of labour resources will eliminate production functions from the analysis of growth. It is possible that this tool can be applied only for the extensive phase of growth.

The book ends with two models of the optimum allocation of the social final product with computations of demonstrative character. The first one is a standard model starting from the production relationship of the type $Y_t = A \cdot K_t^\mu - L_t^{1-\mu} e^{\lambda t}$. The second one may be of greater interest since it contains consumption also in an explicit form and Anchishkin uses here his favourite generalized exponential and logistic functions. According to the model the optimum ratio of productive investments in the social final product is 15.8 per cent for the Soviet economy.

My critique is aimed at proving for the reader that A. I. Anchishkin's book is worth reading. The reason for this is the stubborn consistency of the main concept of the book making Anchishkin a significant representative of a school of growth theory and, of course, also wrecking him at those points where this school, too, fails. It is worthwhile, because his remarks, ideas and openness outgrow this school in several respects, furthermore, for the mathematical refinement, witty models and logic. It is worthwhile, because the book gives an impression of the main indicators and proportions of growth of the Soviet economy. Anchishkin's book gives no answer to "great questions", it is just a work built around the national economic production function, but it is a very far-reaching conceptual and empirical one on the subject of growth of the socialist economy.

J. SZABÓ

NAGY, L.: *Munkatermelékenység és személyi jövedelmek a mezőgazdaságban* (Labour productivity and personal incomes in agriculture.) Budapest, 1976. Közgazdasági és Jogi Könyvkiadó. 407 p.

The author examines the theoretical problems of labour productivity and personal incomes in a period when industrial progress has got off the ground in Hungarian agriculture and when income parity between workers and peasants has been attained. The book consists of three parts. The first discusses labour productivity, the second personal incomes, the third the relation between income and productivity.

The first part of the book defines labour productivity comprehensively, and exemplifies the efficiency and productivity of agricultural labour by national economic comparisons. It analyses the interrelation between the input of living labour and the efficient utilization of objectivized labour, as well as reserves of an increase in efficiency. It is emphasized that the productivity of labour is an economic phenomenon determined not only quantitatively but also qualitatively. There is therefore every reason to investigate the input in materialized labour over and above the analysis of the productivity of living labour. Gross productivity is a better term to express the concept of productivity, the author argues, since materialized labour used up in successive phases of production asserts itself in earlier production processes as input in living labour.

The author points out that the concept of labour productivity is associated with both productive forces and production relations. Consequently, — opposed to the view of a good number of economists — productivity is a category of political economics. Some regard labour productivity as linking labour with use-value, and as thus belonging to the sphere of productive forces only, others maintain that productivity indices are merely statistical categories with more subjective than objective meaning. Yet, the author opines, labour productivity is fundamentally a category of relations of production, or, more particularly, of the technico-economic aspect of relations of production.

The second part of the book examines changes in personal incomes and the income ratio between workers and peasants from the point of view of economics and economic policy.

It describes and systematizes the peculiarities of distribution according to work in agriculture

starting from the fact that the principle of the same income for the same work won't hold good for this sector because of the special conditions of socialist agriculture. This holds true also for income differences among cooperatives and between cooperatives and other agricultural plants. Notwithstanding, within a single cooperative or collective the principle of the same income for the same work should function. The author's reasoning regarding the interdependence between simple and complex labour deserves special attention. He arrives at the conclusion that not only complex, but also hard physical work can be reduced to simple work. In agriculture conditions are worse, and besides mechanical techniques biotechniques also have to be mastered. They make their influence felt, and thereby they may make up for the higher intricacy of industrial labour.

Analyzing the level and structure of personal income the author calls attention to the fact that agricultural income differs much from the concept of peasant stratum-income in its contents, too. In spite of the weaknesses and uncertainties in the statistical basis Lajos Nagy tries his hand at analyzing the relationships between workers' and peasants' personal incomes, and the policy of proportional development in Hungary. In the author's view income differences largely depend on whether they are calculated on a branch level, on the level of employment groups, or on the basis of social class criteria.

The computations in the book are based on the data of household statistics, therefore income calculations infer the income relations of social groups (of classes, strata) from family incomes. The author maintains, however, that household statistics can only be restrictedly applied for the comparative analysis of larger, especially "class-sized" social groups. In Hungarian society mixed families are coming increasingly into predominance. That means that on the basis of family incomes no realistic conclusions can be drawn on the income relations of the fundamental classes.

The author also investigates the relationship between labour productivity and the forms of corporate ownership. He seeks an answer to the question to what degree the jointly-owned (state and cooperative) enterprises floated during the industrialization of agriculture can signal the development of socialist production relations. Lajos Nagy describes joint ownership as a new form of socialist ownership, because, he says, it is not simply the sum total of state and cooperative proprietorship, but in joint ownership each of the

two forms of socialist ownership loses its specific features and enriches the other. It remains obscure however how state property gets enriched in joint enterprises.

The achievement of parity between workers' and peasants' income is a socio-economic change of such importance the author argues, as can be compared only with the revolutionary changes in the Hungarian agriculture after the liberation: with land reform, and collectivization. The book points out that without the conscious policy of the socialist state income parity could not have been reached, but it also becomes clear that the necessary economic conditions for the substantial equalization of real incomes were created by the work and production yields of the cooperative peasantry.

ZS. SIMONITS

BUCSY, L.: *Az innovációk rendszere és a vállalati fejlődés* (The system of innovations and the development of enterprises.) Budapest, 1976. Közgazdasági és Jogi Könyvkiadó. 352 p.

The book consists of three independent units. The first outlines the peculiarities in the progress of innovation; in the second a brief survey is given on the most important theories in Western economics analyzing corporate growth, and an attempt is made to work out a growth model; the third part presents concrete case studies of investigations of product-cycles and product parameters.

The author interprets the concept of innovation as based on the stages of corporate growth. He holds that innovation are active at the back of leaps in growth, making them possible. He stresses that innovations should be assessed in conjunction with all their impacts. The final effect of innovations is improvement in the efficiency of production.

An important and true idea of the work is that innovation is likely to be effective only if the conditions of application exist at the enterprise, that is the enterprise is able to adopt and absorb innovation thereby forming an innovational system. This thought is later expanded by stating that the enterprise can introduce its own new products or procedures – far beyond its former technological level – even if their technological conditions (e.g. those of quality of alloys) are disposable in any other branch of the national economy, or can be guaranteed through import.

According to its meaning and form the author classifies innovations ranging from 0 to 7. In doing so he follows other authors referred to. Classes 0–3 imply changes concomitant with quantitative progress, classes 4–7 mean the application of new technical principles.

Innovation 0 means simple quantitative change in the progressive process; innovation 1 is a form of adaptation to new markets; innovation 2 is a modification in the product range; innovation 3 is "the perfectioning process of the organism of production." The meaning of the other classes is much more difficult to explain briefly. To describe them the author speaks of alterations in the functions of one or several elements of the "organism", of changes in the concept of departure, and of the application of new scientific principles.

Much attention is devoted to the discussion of product cycles. Highly interesting and instructive is here the illustration of the innovational role of product diversification and its integration with the problems of standardization.

The novelty of László Bucsy's theory of corporate growth is the formalized expression of the objectives representing prevailing optimal corporate growth in the function of the efficiency and profitability of labour and in the function of market impacts. He regards corporate objectives as "subject to the annual correlations of the 5-year plan. E.g.: maximalization of profit, decision on development projects, extension of production capacities, installation of investments." [p. 146] Later – when the author discusses the solution of the model – corporate objective means the necessary extent to which the company contributes to national income. The not too clearly defined efficiency of labour and net production form two of the independent variables of the functional relation in the modified model.

To put the functional relation more accurately the author invokes the Cobb-Douglas production function, in which production is determined by the multiplication of five factors: by the corresponding powers of "pure" technical equipment, labour and assets, and by multiplying the rate of technical growth and a proportional coefficient. A whole subchapter deals with trying to fit the introduced model into the planning method of the company.

The second part contains a brief survey of the capitalist theory of corporate growth.

The most instructive part of the book is the third. In this part the author introduces us to 15

case-studies based on his own investigations and on the work of engineer-economists working under his guidance. These studies show the analyses of the most different products – from buses to umbrellas – as to their life-span, rotation, and technical parameters. The case-studies exemplify excellently that the analysis of the cycles and the technical parameters of the product provides significant information for controlling the technical development of the company for framing a product policy, for shaping market behaviour, that is: it is an important means in the foundation of corporate planning.

The book is illustrated by 91 well-drawn, expressive diagrams.

László Bucsy embarked upon the task of discussing highly important economic issues. The concept of innovation was introduced into eco-

nomics by *Schumpeter* at the beginning of this century. In other (Western and socialist) countries the topic already has a rather extensive literature. In Hungary the problems of the product-cycles had been first dealt with already more than a decade ago; innovational processes have also aroused the interest of sociologists for some years now. In Bucsy's work the case-studies are especially interesting. His book again rivets attention on the problems of innovation and corporate growth models, with its life-cycle and parameter analyses it has undertaken a very useful mission inasmuch as it stimulates the practice of economico-technical investigations at the enterprises. Nevertheless, his book is rather uneven, much is superficial, there are immature ideas and phrasing is often careless.

I. G.

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B. CSIKÓS-NAGY

THE PRICE OF NATURAL RESOURCES*

The author surveys the theoretical views about monopoly rent and diminishing returns and their historical background. He outlines the historical development of the price structure, with particular attention to the problem of oil price. He reviews one by one the theories explaining the price of oil. It seems that the price of oil is not determined by purely price-theoretical criteria, but mostly by the price policies of producers and users motivated by power politics.

Monopoly rent and the law of diminishing returns

It has been assumed that the disparity between the price level of products in extractive and nonextractive sectors is unfavourable to the former and this affects mainly the developing countries. If this assumption is correct, then how can the continued exploitation of natural resources in the developed areas be explained? The Soviet Union and the USA are the main producers of natural resources in the developed areas. Concerning the Soviet Union, one can argue that the price structure does not play a decisive role in the structural policy of planned development. But in the case of the USA, we have to deal with a free market economy in which the profit motive has always been decisive in investment activities.

Marx explained the specific features of the pricing of natural resources by the transformation of surplus-profit into ground rent. According to him, when the utilization of a parcel of land ensures but the average rate of profit, then only the landlord is in a position to cultivate it. Any contract of lease presupposes, in addition to the average rate of profit, a ground rent. Therefore, under capitalist conditions, the market prices of agricultural goods must be determined by the production conditions of the least productive land in cultivation. This logically applies to the rent of mining too [1].

These interrelations changed in virtually only a single respect after World War II. Owing to *European agricultural protectionism*, the price level of agricultural products is lower than it would be if the states did not grant budgetary subsidies to producers with unfavourable natural conditions (mountain area, etc.), if they did not subsidize certain agricultural products, or if they did not provide facilities for purchasing of goods, credits, etc., for encouraging intensification (investments, modern agrarian technology). In summary, the following can be stated:

- the price level of manufacturing industries is regulated by the average rate of profit,

*This study was written using the paper presented to the 5th World Congress of the International Economic Association held in 1977 in Tokyo.

- the price level of extracting industries is regulated by the average rate of profit complemented with land rent (mine rent),
- and the prices of goods produced under particularly favourable natural conditions contain monopoly rent as well.

Let us take the world market price of crude oil for an example. This decreased markedly at two instances in the late 50s. When it was at its lowest 1 barrel of crude oil was available for \$ 1.76 (fob ME port). This price decrease resulted in the setting up of the OPEC in 1960. At that time the objective was merely to ward off price fluctuations. But even at the rockbottom, the world market price of crude oil included monopoly rent. In the period about the establishment of the OPEC the cost conditions developed according to the data of Table 1.

Table 1
Crude oil costs in 1961

Region	Share in world production (per cent)	Cost	
		\$/barrel	US cost = 100
United States	38	1.63	100
Middle East	30	0.17	11
Venezuela	16	0.68	42

Source: La Cooperation économique européenne. Troisième rapport de l'OECD Paris, 1962.
Petroleum Press Service, January 1962.

What is actually detrimental for the developing countries lies in their historical background, in their earlier colonial dependence on the industrially advanced countries. This dependence produced and preserved their oligocultural production pattern. Moreover, the majority of the natural resources were exploited by enterprises of the industrially advanced countries, thereby the ground rent or monopoly rent was – partly or wholly – accumulated by these companies. Finally, the price policies of the multinational companies were controlled by the interests of the industrially advanced countries. This point will be discussed below.

According to conventional views in the long run the *relative prices* of agricultural goods and of minerals can't but rise because of the diminishing returns of land. As is known, this law was formulated by Ricardo [2].

The general formulation of the law of diminishing returns is as follows: with a given level of technology, if a certain type of inputs (e.g. labour) is increased relative to the other unchanged inputs (e.g. land) the total output will grow, yet beyond a certain point the additional output belonging to identical additional inputs will be smaller and smaller. Economists usually consider this interpretation of diminishing returns to be a *fundamental* law of economics and technology. [3] However, if we consider the rules of socio-economic *development* as fundamental the above hypothesis is open to debate.

It is worth while to recall the dispute of *Lenin* with the Russian economist *Bulgakov*: "...if each additional investment of labour and capital in land produced not a diminishing but an equal quantity of products, there would be," *Lenin* wrote, "no sense in extending the area of land under cultivation; . . . This is the customary (*and the only*) argument advanced in favour of this 'universal law'. A very little reflection, however, will prove to any one that this argument is an empty abstraction, which loses sight of the most important thing — the level of technical development, the state of productive forces. Indeed, the very term 'additional [*or successive*] investments of labour and capital' presupposes changes in the method of production, reforms in technique . . . It is true that in relatively small dimensions 'additional investments of labour and capital' may take place (and do take place) even when the technique of production has remained unchanged. In such cases, the 'law of diminishing returns' is applicable to a certain degree, i.e., it is applicable within the comparatively very narrow limits which the unchanged technique of production imposes upon the investment of additional labour and capital. Consequently, instead of a 'universal law', we have an extremely relative 'law'." [4]

However, the law of diminishing returns of land was formulated by *Ricardo* in connexion with the expansion of the cultivated area. According to his assumption, with growing needs mankind would be forced to make use of areas cultivable at worse and worse efficiency. The proportion of areas with yields below the average and located far from the market would increase. In mining the proportion of minerals exploitable at higher per unit cost than the average would increase due to unfavourable natural conditions. This is in the background of the hypothesis about the rising relative price of natural resources. Forecasts for the last quarter of the 20th century seem to justify this idea.

In the so-called *Leontief* model, representing the future of world economy, the generalization of specific inputs of the USA assumes that the average relative prices of minerals would increase some 2.7 times between 1970 and 2000; the average price of agricultural goods by 14 per cent, while the average price for manufactured goods would decline by 6.8 per cent [5].

Similar tendencies are predicted for the Soviet Union by *Yu. Yakovets*. He claims that in 1973 the wholesale price level of heavy industry exceeded that of the year 1940 by 9 per cent, but within that the price level of the coal extracting industry increased to 4.71 fold, of iron metallurgy to 2.42 fold, and of the building materials industry to 1.73 fold. For the long-term he assumes an even more marked rise in the costs of mining products because, with high rate of exploitation, the natural conditions of production worsen. There will have to be a shift to exploiting new, qualitatively poorer and more remote areas. [6]

Nevertheless, when studying the price trends of natural resources, the findings of the researches by *Harold J. Barnett* and *Chandler Morse* should not be disregarded. Investigating data of almost a century they proved that the relative costs of extractive output diminished in the United States, that is, the evidence shows increasing, not diminishing returns. [7]

Table 2

*Labour and capital inputs per unit of extractive output
in the United States
(1929 = 100)*

Period	Total extractive	Agriculture	Minerals	Forestry
1870-1900	134	132	210	59
1919	122	114	164	106
1957	60	61	47	90

Reference: Barnett, H. J.—Morse, Ch.: op. cit.

Table 3

*Labour-capital input per unit of extractive output
compared with the unit costs
of non-extractive goods in the United States
(1929 = 100)*

Period	Total extractive goods	Agricultural goods	Minerals	Forest products
	relative to non-extractive goods			
1870-1900	99	97	154	37
1919	103	97	139	84
1957	87	89	68	130

Reference: Barnett, H. J.—Morse, Ch.: op. cit.

According to statistical data processed by ourselves unit costs in the extracting branches decreased to about half. Cost reduction was even greater in mining. Returns diminished only in forestry: unit costs increased between the Civil War and World War I. However, in the post-World War I period the returns in forestry were approximately constant (or somewhat rising).

Ricardo's hypothesis: the effect of technological advance is mostly nullified by the decline in resource quality. Unit costs in the extractive sector must consequently increase relative to manufacturing. But in reality unit costs in the United States extractive sector decreased relative to those in manufacturing in the period under review. In this respect, too, forestry was once again an exception.

We are, of course, aware that the market motifs for development projects have always been very powerful in the USA. Except for state of war, capital investments for the utilization of domestic natural resources were made only when this proved more profitable than capital exports.

In connexion with the trend of value relations in the United States the circumstances of the birth of the law of diminishing returns on land are remarkable. Ricardo formulated this law relying on the experiences of the situation in Britain following the Continental Blockade of the Napoleonic wars. This was really a specific situation, relying on which a "universal law" can hardly be based.

The likelihood of the diminishing land return in the last decades of this century cannot be excluded. Nevertheless it seems that price of natural resources between 1970 and the year 2000 will be determined less by input than by scarcity, and *efforts to get the highest ground (monopoly) rent*, that is to say by related conflicting interests.

The historical and the expected price structures

The trend of the relative prices of natural resources is measured in international trade by the terms of trade. The terms of trade between products of the extracting and the manufacturing branches were the following in the past fifty years:

Table 4
Terms of trade between extractive and non-extractive goods
(1950 = 100)

Year	Extractive	Non-extractive	Terms of trade
	sectors		
1928	87	129	146
1938	34	62	182
1948	100	121	121
1958	98	123	126
1965	102	136	133
1970	105	149	142
1975	317	271	85

References: Review of World Trade
U.N. Monthly Bulletin of Statistics

In the last half a century there were two extremely favourable opportunities for the extractive sectors: one in 1950–52 following the Korean war, the other one in 1974–75 following the oil price explosion. For the non-extractive sectors the last peace year in the interwar period was an advantageous one. Price movements of different intensities and, sometimes, in different directions were induced by factors of demand and supply, concerning extractive and non-extractive goods.

The price dispersion intensity around the average price is greater with extractive goods than with non-extractive ones. In the wake of growing demands caused by war or a

Table 5

The intensity of world price dispersions around the average price

Period	Extractive	Non-extractive	Average
	sectors		
1950–1959	8.7	5.7	7.5
1960–1969	2.2	0.9	1.0
1970–1975	25.8	5.9	17.5

References: Review of World Trade
U.N. Monthly Bulletin of Statistics

break of production owing to a natural disaster, the prices of natural resources rise steeply to fall again because of overproduction brought about by new investments or favourable climatic conditions. Short run price fluctuations bring about elements of instability. This instability means grave disadvantages.

– In the case of an excessive decline of prices difficulties arise concerning exporting countries, because of the shortcomings of foreign exchange earnings reckoned with in their development policy. This disadvantage is particularly great if it affects a developing country with monocultural economy.

– A *price jump* causes sudden excessive expenses in foreign exchange to the importing country and may upset the equilibrium of its international payments.

The 1973 oil price explosion seems to have created a profoundly new situation. Since then hectic price rises could be experienced in the sphere of natural resources. But whereas in case of most natural resources the business-cyclical sensitivity of prices has remained more or less unchanged, the relative price of oil has got stabilized for nearly four years on the top level reached with the price explosion. The oil price deserves, irrespective of the above, special attention. *First*, oil is the most important mining product, as shown by the convincing calculations of *Friedensburg* (see Table 6).

Table 6

Share of some important minerals in the value of world mining (per cent)

Mineral	1860	1913	1962
Crude oil	0.1	8.1	41.4
Natural gas	—	0.5	3.9
Coal	54.1	52.4	21.4
Primary sources of energy	54.2	61.0	66.7
All other minerals	45.8	39.0	33.3
Total	100.0	100.0	100.0

References: Friedensburg, F.: Die Entwicklung der Bergwirtschaft der Welt in den letzten hundert Jahren, Glückauf, 6. Jan. 1965. pp. 63–77.

Second, in the foreseeable future, energy may be the main barrier to economic growth. Almost every international conference discussing problems of economic growth reached such a conclusion — among them the seminar* held in December 1973 in Stockholm under the auspices of the ECE, chaired by Erik *Lundberg* where a team of economists discussed issues relevant to the factors and conditions of long-term growth.

Thus we intend to approach the expectations for the price tendency of natural resources through the oil price, although there are several specifics in the background of the universal laws valid only for some of them. However, we may put it as a general assumption that the hectic price movements of natural resources in the world market cannot be explained entirely by the market price theories.

According to market price theories, *demand is determined by prices*, and it changes as a function of prices. The 1973 oil price explosion increased the world price of crude oil four times overnight. According to the course prescribed by the demand curve, demand should have decreased. But the price explosion has had hardly any influence on the oil demand. What has actually happened is that development projects rejected in the past for their inefficiency have been revived and energy savings have been given greater importance. All this is significant, yet in its character it differs from the suppositions of conventional price theories.

Mostly it is the theories of "imperfect" competition and of "monopolistic" competition that provide a basis for a scientific analysis of price movements in modern market economics. [9, 10] According to the theory of "monopolistic" competition, the substitution of products transform the competition between enterprises into a competition between products. Owing to its suitability for heating purposes, oil can be brought to a common denominator with other energy carriers; e.g., with coal. Comparison, in this case, is based on heating values. It could basically be supposed that the relative world market prices of energy carriers would adjust themselves to their relative heating values. Actually, divergencies from parity prices are substantial in both directions; the coincidence of the two is only incidental. (See Table 7.)

Let us take the cost of *oil substitution*, considered today the most important price determinant. Table 8 shows the different evaluations of these costs.

The price of 7 dollars per barrel is the lowest limit—confirmed in declarations by several industrially developed countries — encouraging investments in sectors capable of producing substitutes. The price of 20–30 dollars per barrel is explained in the H. *Ager-Hanssen* paper, based on which the "Offshore North-Sea" oil conference held in Stavanger in the autumn of 1976 investigated the costs of substitutes [11]. At the November 1976 meeting of the Oxford Energy Policy Club, several experts considered a price of 18 dollars per barrel as reasonable for the future. We could carry on with other versions of prognoses but the aforesaid give a good insight into the complicated problems

*The discussion were attended by: *Blanc, L. P., Horvat, B., Mason, E., Pajestka, J., Stone, J. R. N. and Tinbergen, J.* [8]

Table 7

*The relative world market prices
of crude oil expressed in coal equivalent**
(coal price = 100)

Year	Relative price	Year	Relative price
1929	131.5	1958	112.0
1938	125.0	1965	87.7
1948	98.0	1970	54.6
1954	101.0	1975	242.1

*Calculations based on statistical data of the Federal Republic of Germany (oil price cif FRG port, coal price fob FRG mine).

Table 8

Prognosticated relative world market oil price about 2000

	(at 1975 \$ value) \$/barrel
Lowest price limit	7
basic price (1976 price)	11.5
<i>Top price limit:</i>	
Estimation I.	18
Estimation II.	20–30

arising around the measure and ways of substitution, the judgement of marginal cost, etc., and which might lead to substantial disagreements.

It is a relevant question to ask whether the criteria of price theory based on market patterns illustrated by abstract models could apply to the conditions prevailing in the world economy. This is the really debatable point. The prices of natural resources operate as equilibrium prices: however, in their background a definite price policy is to be found, which in its character is power policy. That is why, in the analysis — both present and future — of the prices of natural resources the limits set for market mechanism to operate are rather narrow. What differentiates the future from the past in this respect can be summarized in the point that the price policy of natural resources is slipping under the control of multinational companies, and that the role of the raw product exporting countries is ever growing in its significance.

The oil resources of the developing world used to be exploited mostly by international monopolies of the Western world. Through foreign investments these enterprises could establish favourable market relations for their own — i.e., industrially developed —

countries. It was their real business interest, too, that part of the ground and monopoly rent should not be realized in the price of crude oil; and as big a part as possible of the rent should be realized in the higher verticalities of production — i.e., in domestic production. This was the way in which the oil price policy could mostly contribute to the general industrialization of the home countries.

Multinational companies used to keep the price of oil generally below its relative use value. *This price structure brought about a definite production structure* very favourable for industrially developed countries and contributed to the financing of industrialization. This price policy was supported by a specific budgetary policy, in which two elements are of major importance: (1) The *tariff system* in which the imports of natural resources are free of duty and customs tariffs increase — as a general rule — in the function of the degree of processing. (2) The *consumer price system*, according to which a part of the ground rent of natural resources is charged at the stage of consumption goods (petrol, sugar, etc.); i.e., not on the spot of the exploitation of natural resources, but at the spot of the consumption of end products. Thus, the *historical price-structure* can be explained only if we know the power structure that characterized the oligocentric world economy together with its organic parts, the countries of colonial or semi-colonial status.

Consequently, as the formerly colonies became independent countries, the criteria of economic decisions, among others pricing, have changed. Both inside and outside of the UN the developing world pursues a price policy to reevaluate natural resources. The OPEC price policy is the most spectacular manifestation of a challenge outside the UN. In essence, it transforms an end-product-centered price policy dictated by multinational companies into a raw-product-centered price policy pursued by the oil exporting countries. This is the very point which can be considered as relevant in the assessment of future prices of all natural resources.

The OPEC's *price policy* has raised the world market price of oil above its relative use value. This price policy has laid the foundation for a new policy regarding the pattern of production and as such is a carrier of a transitory structural crisis.

Price stability or trade war

The prospective relative price trends of the natural resources are closely linked with the so-called North-South problem since the economic pattern of the economically advanced world is a polycultural one while the production pattern of the developing world is oligocultural. The bigger share of exports by the developing world consists of minerals and agricultural products. In certain developing regions 80 to 90 per cent of foreign currency revenues derive from them. Under such circumstances it is supposed in the developing world that throughout from the historical point of view a rather long period of transition rising relative prices of natural resources could provide the firmest basis to finance a fast economic growth.

All this is at the same time an ambiguous process, since the rising relative prices of natural resources are not unequivocally advantageous for the developing world either. From time to time different groups of countries benefit from the differentiated price movements while other developing countries are facing simultaneously grave economic difficulties. It is, however, a fact that the uprating of the natural resources is one of the central issues which the developing world has put on the agenda in the institutional system of the new international economic order.

The increase of the relative prices of natural resources need not necessarily induce a general rise in the price level, provided that harmony is maintained between the extent and way of raising the price and the requirements of price stability. Such a rise of the relative prices of natural resources involves a re-distribution of incomes

- among countries as a function of the commodity pattern of exports and imports;
- inside the countries among economic branches, in favour of the extracting ones.

It seems that the change of the price pattern specified in the Leontief model indicates how the rise in the relative prices of natural resources may be reconciled with the requirements of price stability. The UN resolution on the new international economic order may provide the grounds for such a transformation of the world market price pattern. In the interest of a favourable treatment of the countries of the developing world, this resolution calls for

- an improvement of the competitiveness of natural materials as against synthetic ones (plastics),
- the recognition of the raw material extracting cartels,
- the indexing of raw material prices (simultaneously and proportionately with the prices of finished products),
- conclusion of long-term commodity agreements; establishment of an inter-dependent system of stabilizing stocks and of price equalizing funds (pools).

It was in accordance with this UN resolution that the fourth UNCTAD adopted *the integrated raw material program*. This covers the following products: bananas, bauxite, cocoa, coffee, copper, cotton, hard fibres and products therefrom, iron ore, jute and products therefrom, manganese, meat, phosphates, rubber, sugar, tea, tropical timber, tin, plant oils, including olive oil and oily seeds. The objective of the integrated raw material program is to stabilize raw material prices at a level which

- is just for producers and fair for consumers
- takes into consideration the inflationary effects and the economic, monetary and financial changes in the world,
- enhances the equilibrium of demand and supply.

However, for the time being, *the forces paving the way of stabilization* by coordination of mutual interests are weak. This is shown by the disputes about the Integrated Raw Material Program too. According to the Integrated Program, negotiations are carried on in two main fields.

For 18 raw materials commodity agreements are to be concluded till the end of 1978. In the context of these agreements the following are to be laid down: the prices

deemed desirable for the given commodities, the principles and methods of forming these prices, the instruments and rules that could in principle provide for keeping the actual world market price within the limits of the price zone agreed upon. Such instruments may be: international buffers for the purpose of intervention purchases and sales; export quotas, mutual supply and purchasing commitments of exporters and importers, etc.

Discussion of a common monetary fund. The goal is to set up a \$ 6 billion fund to finance the price levelling stocks of the 18 prime raw materials. Exporters and importers would contribute to this fund in a ratio of fifty-fifty per cent. The amount payable by each country would be determined according to its share in the world trade of the 18 commodities specified in the Integrated Program, or in that of all raw materials (excluding crude oil) the GNP, and the value of per capita GNP.

The agreement is hampered by the natural conflict of interests, i.e. by the fact that price stability is preferred by the exporter at a high, and by the importer at a low, price level. Any price fluctuation is the expression of some average. In a period of high export price the exporting country could set aside a part of the price revenue and from this reserve it could complement its income when the export price is low. On the other hand, the importing country could build up reserves in a period of low import prices and could subsidize therefrom imports when the price is high.

It may provide some guidance in this problem to recall that the search for an institutional solution of price stability always occurs at times when the prices of raw materials and of agricultural (tropical) products are low in the world market, but never happen when these prices are high. This means that the generally exporting countries are the initiating ones. In other terms: what is favourable for the producer has a more powerful representation than what is fair for the consumer.

The complexity of the problem of the relative price of natural resources is augmented by its arising alongside *inflation*, and thus by its being coupled with the problem of *indexation*. I.e. in the long run inflation is accelerated by indexing because it exempts a given range of commodities from the rule of the average inasmuch as in this case the average is considered to be the minimum of price increase.

The analysis of world market price conditions suggests that the signs of a trade war have strengthened as an aftermath of the oil price explosion. This is at the same time an indication that it is hardly possible to see a rational solution in the conventional way: i.e., in the framework of a market mechanism. One is inclined to believe that the free market system was workable only in a period when power political discipline — and as a last resort, war — could be used.

The 1973 oil embargo decided by OPEC and the price explosion following it (or rather the success of these actions) pointed to the relative vulnerability of developed capitalist countries, of their conflicting interests and to the limits of possible retaliations. Beyond this, the OPEC countries have evidently taken into account the rigidity of demand, determined by basic interests in economic growth and employment in the industrially advanced capitalist countries.

Table 9

The average rate of inflation within countries and on the world market

Period	Average rate of inflation			Within countries**
	on the world market*			
	extracting branches	non-extracting branches	total	
1950-1959	-0.5	2.4	1.0	3.1
1960-1969	0.6	1.3	0.8	3.0
1970-1975	25.4	12.9	17.9	9.0

*Monthly Bulletin of Statistics and Yearbook of International Trade Statistics.

**Data obtained by the Research Department of the International Monetary Fund, from averaging the annual rates based on data of 14 industrially developed capitalist countries. (Wholesale price index).

Such a challenge of the developing world has obviously played a part in the *changing attitude of industrially developed capitalist countries in their export price policy*. Up to the 1970's there was a relative price stability on the world market in spite of the ever growing inflation in the industrially developed capitalist countries. This inflation extended in the 1970's also over the world market.

From World War II. up the 1970's the industrially advanced capitalist countries attempted to avoid the effect of home-inflation to invade the international market. The business policy of enterprises considered this important with a view to preserving their *international competitiveness*, an endeavour supported by the state in the interest of *preserving the value of its currency*. Thus' in a way, the domestic inflation helped to finance the policy of relatively stable export price. But in the 1970's a change helped to finance the policy of relatively stable export price. But in the 1970's a change took place. In that period — at least in some industrially advanced capitalist *purposes of an antiinflationary policy at home*. This is one of the new features to be taken into consideration when examining the future prices of natural resources.

The influence of government policies on the formation of world market prices is steadily increasing. Consequently, an economic stability can be expected only from an internationally harmonized price policy on the level of governments. An agreement about the interpretation and practical application of the basic principles of a new international economic order should be reached as soon as possible, to be followed by a coordinated operative price policy of all governments.

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ЦЕНА ПРИРОДНЫХ РЕСУРСОВ

Б. ЧИКОШ-НАДЬ

Статья написана на основе доклада, представленного автором на V. всемирный конгресс Международной экономической ассоциации в Токио.

Во вступлении автор рассматривает теоретические взгляды на монопольную ренту, закон убывающего плодородия и их исторический фон. Затем он прослеживает историческое развитие структуры цен, обращая особое внимание на вопрос цены на нефть. Он останавливается на различных теориях, объясняющих формирование цены на нефть. Согласно теории монополистической конкуренции, цена нефти определяется затратами на добычу остальных энергоносителей, способных заменить нефть, например, угля. Автор указывает, что и эта теория не дает возможности для относительно точного прогнозирования будущей цены на нефть: прогнозы цены нефти на 2000 год расходятся в диапазоне 18–36 долларов за баррель. Складывается впечатление, что цена нефти определяется не просто критериями теории цен, а главным образом политикой цен производящих и потребляющих стран, мотивируемой политическими аспектами.

Далее автор распространяет анализ на проблему цен остальных природных ресурсов, обращая особое внимание на требования развивающихся стран о создании справедливых и прочных цен на сырье.

A. M. VACIĆ

DISTRIBUTION ACCORDING TO WORK AND COMMODITY PRODUCTION*

Marx assumed the assertion of the principle of distribution according to work performed in a socialist economy where commodity production would come to an end. More or less, however, commodity production is characteristic of the actual relations in contemporary socialist countries. The author examines the emergence of this contradiction and the ways of its solution under three forms of socialist economy which he identifies as the physical, directive production, the system of formal commodity production and the system of socialist commodity production.

Introduction

There are two basic approaches to the analysis of all problems related to the economic and socioeconomic systems of socialism as well as to the search for solution to these problems. One of these approaches starts from the principle that the basis of all solutions is provided by the anticipations of the classics of Marxism about the future organization of the socialist and communist societies; this approach aims at making the organizational forms of all countries to resemble these anticipations as closely as possible, or, at least, constitute transitional stages to their realization. The other approach, while not denying the importance of the anticipations of the classics of Marxism about the socialist and communist societies, intends to take into account two further sources of information in the examination of certain problems of socialism, especially in the search for the solutions of each development stage of each country. One is provided by the general methodological principles of the classics of Marxism, concerning certain types and groups of phenomena of social existence; the other is provided by the knowledge of the specific circumstances under which socialist revolution took place in each country, which influence not only the sequence, rate and extent of realization of the above mentioned

*The paper of prof. Vacić we publish in this issue is a slightly abbreviated report of his, prepared for and delivered at the symposium "Marx and Contemporaneity - VI", held in Belgrade in 1975, in connection with a centennial of Marx's famous work "Critique of the Gotha programme".

The concept "commodity production (or economy)" denotes - expressed in the most concise form possible - an economic system based on the action of the market and price mechanism, constituting the opposite of the term "natural production (economy)", a system based on the naturalization of economic relations, i.e., on the direct distribution (without the market) of production factors and of the products and on direct links between production and consumption units. For closer differences and similarities between these two see [1].

anticipations in the individual countries but also their general applicability under certain conditions and in certain periods.

However, self-explanatory the advantages of the second approach may seem, a choice between the two is far from being easy. This can be seen from the fact that in the history of socialism so far the first approach has obtained precedence over the second. This was motivated by several circumstances: the first approach enjoys the advantages of credibility and authority supported by the whole oeuvre of the classics of Marxism. The other solution always carries the risk of some greater or smaller deviation, which can always be easily qualified or disqualified politically as a revision of Marxism, as has happened several times in the history of socialism and as happens now as well in the relations between certain socialist countries. Also, the first approach has the attraction of simplicity, the clarity of principles by which it is inspired and for which it directly fights; the second one demands a critical stand against these principles and, what is even more difficult to accomplish, demands their extension, deepening, their concretization and harmonization with the circumstances and possibilities of each socialist country. Given the theoretical works of the classics of Marxism and relying also on the political requirements determined in those works, the first approach also receives a ready conceptual system, a political program and its main social carriers. The second approach requires the widening of the conceptual system, also, in many respects, its reformulation so that the political program should not be restricted to general principles but should also define their concrete historical significance, the forms and rate of their concrete historical significance, the forms and rate of their realization in order that the majority of the population might be attracted in each country according to the specific conditions, including those who do not (yet) share the standpoint of Marxism or socialism.

Although, for the reasons listed, the first approach is always more secure and, considering the relatively recent appearance of socialism, its preponderance is fully understandable, we think that three reasons justify preference for the second approach.

Firstly, we cannot find the total organizational structure of socialist economy in the works of the classics of Marxism but only a limited circle of hypothetical standpoints concerning some of its forms, usually for the purpose of comparison with capitalist or pre-capitalist modes of production, and in debates with different vulgar, pseudo-socialist, petty bourgeois and similar opinions*. If we failed to take this circumstance into account and examined the theoretical declarations and economic practice of the socialist countries with the anticipations of the classics of Marxism, it would certainly turn out that neither of them would stand the test and each would deviate from one or another of the standpoints taken by the classics of Marxism. Even if we followed this procedure in the

*This circumstance had been pointed out long ago by O. Lange, the well-known Polish economist: "Marx and Engels, founders of scientific socialism, devoted their efforts to the analysis of capitalist economy. Although they did make some very general remarks on socialist economy, they refused to elaborate this problem complex in principle, for fear that such studies would have been Utopian rather than scientific." [2]

case of Lenin, contrasting his opinion concerning commodity production before the October Revolution with the policy of the NEP (New Economic Policy) formulated and initiated by himself, the above remark would hold. For this reason, we think that the anticipations of the classics of Marxism concerning socialist and communist societies should not be transformed into dogmas, into a Procrustean bed of economic practice for all socialist countries and for all development stages.

Secondly, our age is one of transition all over the world, causing a marked heterogeneity of interests, opinions, and commitments, not only among countries but almost within each of them. There is hardly any country among the greater and more important countries of the world in which there were no deep internal shocks during the last decades, i.e. since World War II, in close relationship with significant ideological and theoretical confrontations. The efforts made at a uniform interpretation of all theses of the classics of Marxism for every country, — often leaving the question unanswered whether this interpretation was correct or distorted, (as shown by the practice of several countries) — necessarily slowed down socialism as a worldwide process and diminished the social weight of communist parties and other political forces that had based their programs on Marxism. Consequently, assessment of the special conditions of each and every country is a significant requirement not only in the concrete building of socialism, but also for working out the program of the socialism as well as the ways leading to it in countries where the socialist revolution is yet to come and also where socialist development is already under way.

Thirdly, the experiences of socialism gained so far during its relatively short history have unambiguously shown that the anticipations of the classics of Marxism are usually insufficient for the solution of concrete problems, so that their direct application often leads to mistaken steps in practical politics. The practice of all socialist countries saw many such instances, and there is no need to enumerate them in this place.

Allowing that the above arguments may be insufficient for the application of the second approach, we must state that it is nevertheless almost unavoidable. Since with Marx the analysis of distribution according to work performed is to be found in a context that attaches it to the elimination of commodity production, a study of distribution in the present socialist countries that remains strictly within the framework of the anticipations of the classics of Marxism, including the Critique of the Gotha Program, would necessarily lead to either of the following, equally aprioristic and scholastic conclusions: either distribution according to work performed exists under socialism and, in that case, commodity production is nonexistent; or, there is commodity production in the socialist countries, in that case however, relations are based on a principle other than distribution according to work performed. In that case even the title of this paper were a *contradictio in adjectio* together with the concept of socialist commodity production — at least in certain opinions. Since the economic practice of all socialist countries is based, to a greater or smaller extent, on the principles of commodity production — even in countries where it is thought that these principles are not effective —, and, at least in our opinion,

their socialist character cannot be queried merely on this basis, the problem we chose for the title of this paper is certainly real.

When we are aware that the original concept regarded the elimination of commodity production as a categoric and essential condition of distribution according to work, how can we define the mutual relationship between distribution according to work performed and commodity production as theoretical and real social phenomena?

Distribution according to work performed has been accepted as a general principle of socialist distribution by all Marxist socialists. The different conclusions drawn during the elaboration of the principle and the existing differences among the present practices of different socialist countries, and those in the different development periods within a single socialist country, show that this problem is not simple at all; agreement has been achieved much more on points rejected than on what is accepted. All Marxist economists and socialist countries agree in the negative content of distribution according to work performed: abolition of all rights other than the work performed, to a share in the socialist product and elimination of the appropriation of surplus product on the basis of ownership of the means of production. In this sense, interpreted as negation of the exploitation of man by man, this thesis involves no problem, at least when the characteristics of socialism as a system of distribution are concerned, apart from various secondary relations of production that exist in every socialist country; and equally apart from phenomena related to crime.

However, the elaboration of a positive definition of distribution according to work performed, i.e. the concrete elaboration of how work should constitute a basis and a measure for sharing the social product, involves problems which are solved in the economic theories and economic systems of the different socialist countries in different ways. Although these differences manifest themselves in several institutional, organizational, and even technical variations, all solutions of distribution according to work performed can be classified into one of three basic forms. In the formulation, adoption and subsequent modification and rejection of each form the standpoint on socialist commodity production plays a decisive role, as this was the basis for the determination of not only the economic form in which the product of labour was quantified but also of the quantity of work serving as an exclusive indicator for the distribution of the social product. For this reason, the basic forms of distribution according to work performed, asserted in socialism and in contemporary socialist countries can be identified in the forms prevailing in the directive system of economic planning in kind (i.e. in physical units of measurement), in the formal systems of commodity production, and, finally, in the systems of socialist commodity production proper, as neither of these forms has lost its theoretical importance or practical application.*

*This classification was first used by the author in a paper [3] published in 1970. Some of the arguments proposed here also originate from this work.

**Distribution according to work performed in the economy
planned in physical terms**

As long as the dominant opinion in Marxist economic theory was, on the basis of theses expounded in the "Critique of the Gotha Programme", in the "Capital", in "Anti-Dühring" etc., that socialist economy involves the negation of commodity production, it was thought that labour under socialism was of a directly social character. Accordingly, the practice of the socialist countries started from the supposition that the work of the socialist producer got its final social appreciation already in the course of production, in a natural, concrete form, and, as such, constituted a basis for sharing in the social product. Such theoretical views were reflected by the nationally uniform wages and salary tariffs; by the general and specific rules valuing individual kinds of labour according to their concrete forms and complexity, the education and skill necessary for their performance, the necessary experience (usually measured in terms of years spent in work) and similar characteristics by which work is measured and quantified in advance. It is a significant feature that under this form of the realization of distribution according to work performed the distribution of personal incomes does not depend on the activities of the producing units in which work is actually performed. As all the positive and negative results of the activities of the producing units directly flow into the central social budget, the source of the personal incomes is not the result of the productive work of the production unit but the universal central fund earmarked for personal consumption.

Under such circumstances the directly social nature of labour leads to the formation of such system of distribution in which it is immaterial for the producer's (and, in general, for the working man's) financial situation which producing unit he works in, what results his unit and he achieves. His share in distribution is determined by the specific form of his labour, thus, it is independent from the specific conditions of the producing unit he works in, whether its position is better or worse, whether its results are better or worse, as payment is effected from a global fund, according to predetermined measures. Even if the work and results of the individual economic units are observed and measured, this basically serves but recording and control purposes and has no direct influence on the financial position of either the producing unit or the producer. There exist certain forms of stimulation for the whole of the national economy and certain producing units, these usually concern exceptional individual or group performances and they are not of a standing, economic, nature but mainly of a pedagogical and moral one.

In its most marked form this system of distribution operated in Soviet Russia during the era of war communism (1918–1921), when the producing units practically ceased to be economic units, relations were determined in physical terms (compulsory delivery in kind of surplus products was prescribed for the peasant farms), and the activities of the producing units were entirely integrated into the system of a global state budget. Even the distribution of personal income was determined in kind, and, accordingly, it was mostly paid in kind instead of money.

Although later such an extreme form of the system was discontinued, the principles remained in force for a long time. The fact that personal income is paid in money does not alter the situation since money is also treated as a means of the capitalist system utilized by socialist society for the realization of its own goals. In fact, even the possession of money does not guarantee the possibility of acquiring the material goods one needs, either because supply is not enough to meet demand at the given prices, or because trade in basic products is not free but subject to rationing, or their acquisition requires special administrative permits. Thus, prices, similarly to money, do not constitute allocation criteria for the available resources, either in the field of consumer articles, or in that of capital goods. They function only as measures of accounting and supervision, and this is understandable in the light of the fact that the whole system is based on the negation of commodity production and the value categories.*

Such a system of distribution also existed in Yugoslavia, if not in such a marked form. It was introduced immediately after the war, and remained in force, with certain alterations and amendments until 1952. Similarly to the one in the Soviet Union, this system was characterized by a nationally uniform wages tariff for economic as well as non-economic activities, and by the administrative distribution of goods for personal consumption (rationing). The compulsory delivery of agricultural products was also characteristic, as well as the system of special permits for certain other products, sale on special terms (e.g. a product could be purchased only if a specified quantity of another product was sold simultaneously) etc.

As has been mentioned, the above described system was rooted in the understanding that a socialist economy is not a commodity economy. This point of view was generally accepted in Marxist theory until, and after the October Revolution, as long as until 1941 when Stalin declared that the law of value asserted itself in socialism (more exactly, until 1952 when he expounded this opinion in his work "Economic problems of socialism in the Soviet Union"). It was increasingly disproved by social development and by the end of the 1950s it became entirely refuted. The theoretical acceptance of commodity production under socialism is such a rule to which there is practically no exception, not only in Yugoslavia but in the Soviet Union and other socialist countries as well (apart from Albania, China and other Asian countries, whose theoretical standpoints and practice we know insufficiently). In more recent literature a contrary stand has been openly taken only by I. S. *Malishev*, V. A. *Sobol'*, N. V. *Hessin* and some other Soviet economists. However, their views were sharply criticized and rejected by other economists and by organs representing the official standpoint. Development of all socialist countries has so far proven that at the present stage of the development of the means of

*"The factual role of prices in socialist economy does not depend on the importance attributed to them but on how much the assertion of the law of value is limited. The function of prices is determined by the economic mechanism. The substance of the problem is, thus, by what mechanism the state controls the national economy. When prices are set by the state, they may easily become merely *accounting prices* —" as Béla *Csikós-Nagy* wrote more than fifteen years ago. [4]

production, with the present material and social structure of production, the commodity form of the relations of production is objectively necessary and is of necessity a characteristic feature of the socialist system. For this reason, the viewpoint has gained acceptance that the commodity form of the relations of production is a normal phenomenon of the socialist relations of production and not some inheritance from the past, or a secondary form, caused perhaps by exogeneous factors.

Abandoning the standpoint concerning the non-commodity producing nature of socialist economy and the corresponding form of distribution according to work performed was, first of all, due to the fact that it was not in harmony with social practice, with the historical experiences of socialism. In spite of the organized economic, political, and sometimes even physical pressure, commodity production maintained itself, it spread, renewed itself and extended to many fields. This process can be pointed out beginning with the war communism policy of Soviet Russia between 1918–1921 to the economic reform of the 1960s, which opened a greater sphere precisely for the operation of the price- and market mechanism in every socialist country. For a number of reasons, it may be said of several socialist countries, that, on the whole, their economies are more of a commodity producing nature than they had been before the revolution when their main economic branch, agriculture, had been largely organized on the basis of “natural” (i.e. non-commodity) production.* Under the circumstances of such “non-natural”, but an omnipresent, increasing yet repressed and deformed commodity production the concepts and means based on the negation of commodity production necessarily entailed adverse effects and limited the otherwise attainable achievements of socialist economy. How did this manifest itself in the sphere of distribution?

The principle of distribution according to work performed, as expounded in the “Critique of the Gotha Programme”, starts from the termination of commodity production and from the principle that both measures relevant for the determination of the individual’s share in the social consumption fund are given in a natural, direct form, as simple working time input: that both social product and the working performance of the producer are given in terms of labour input. This was published as a *standpoint* in the “Critique of the Gotha Programme”; twenty years earlier, in the first volume of the “Capital”, this had been expounded only as a *hypothesis*.

Examining the nature of the post-capitalist society as “a community of free individuals, carrying on their work with the means of production in common, in which the labour power of all the different individuals is consciously applied as the combined labour power of the community,” foreseeing that “the mode of this distribution will vary with the productive organization of the community, and the degree of historical development attained by the producers,” Marx says: “We will assume, but *merely for the sake of a parallel with the production of commodities*, that the share of each individual producer in the means of subsistence is determined by his labour-time. Labour time would, in that case, play a double part. Its apportionment in accordance with a definite social plan

*In German texts the term “Naturalwirtschaft” is found.

maintains the proper proportion between the different kinds of work to be done and the various wants of the community. On the other hand, it also serves as a measure of the portion of the common labour borne by each individual, and of his share in the part of the total product destined for individual consumption. The social relations of the individual producers, with regard both to their labour and to their products, are in this case perfectly simple and intelligible, and that with regard not only to production but also to distribution." (italics by A. V.)

In the "Critique of the Gotha Programme" we find this standpoint again, but no more as a possibility ("for the sake of a parallel with the production of commodities") but as a characteristic feature of "the cooperative society based on the common ownership of the means of production." Marx maintains his basic thesis concerning the non-commodity producing nature of society here as well. In this society "producers do not exchange their products; just as little does the labour employed on the products appear here as the *value* of these products, as a material quality possessed by them, since now, in contrast to capitalist society, individual labour no longer exists in an indirect fashion, but directly, as a component part of the total labour."

This is the situation in production, and, consequently, in distribution as well: "the individual producer receives back from society — after deductions have been made, exactly what he gives to it. . . . As far as the distribution of the means of consumption among the individual producers is concerned, the same principle prevails as in the exchange of commodity equivalents: a given amount of labour in one form is exchanged for an equal amount of labour in another form. The right of the producers is *proportional* to the labour they supply, the equality consists in the fact that measurement is made *with an equal standard*, labour" [5].

By reducing it to a few logically ordered principles, this system can be expressed in a few theses:

a) The overall social framework of economic life "The organism of social production" is a "natural" economy*, or, formulated perhaps more exactly, a non-commodity producing economy, as the meaning of the word "natural" is often identified with the notion of the underdeveloped, primitive, economy and the economy of socialism is not such and cannot be such.

b) The general framework of non-commodity production determines also the form of the social quantification of all economic quantities, including the social product and the individual performance of each producer.

c) The measure of the volume of social product as well as the criterion of regulating its composition according to the needs of society is labour time.

d) Apart from the differences in the frameworks of examination (individual and society), the measure of the individual performance of each producer, of his contribution to the social product, is identical with the measure of the social product, and can be reduced to the labour time used up.

*In German texts: *Naturalwirtschaft*

e) The labour time used up individually asserts itself as a measure of the share of the producer in the social product *only relatively, for the fund for personal consumption and not absolutely, for the total social product*, as the producer "gets back . . . exactly what he gave the society", but only "after deductions", that is, after the deduction of the parts of the social product necessary for other purposes.

When we compare the described form of distribution with these theses, the total unreality of the former becomes conspicuous, as it applied criteria formulated for a definite historical situation to another one, and this only partially and inconsistently:

a) the social framework of the economic life ("the organism of social production") is not of a non-commodity producing nature: it is a suppressed and deformed, but a nonetheless valid commodity production.

b) the social product is measured not in units of labour time but, first of all, in kind, then in kind and in terms of money, with significant price disparities determined by economic policy, not only between individual products but also among whole branches of the economy.

c) the social labour time fund* is allocated among economic activities mainly according to targets defined in physical terms, but their departure from the actual weights of social needs create disproportions; within these, the most important is the lag in the production of means of subsistence, especially of agricultural products.

d) Individual and collective labour performance most often remain unmeasured, or the purpose of measuring is merely to record and control, and the results never influence significantly the economic position of the particular producing units or the personal income of the producers. As under such circumstances the sole basis of personal income is provided by predetermined formal measures – formal training, length of service, working place and the like – the practical basis of personal income is here a *supposed labour input, not the one actually expended and socially appreciated*. Consequently, such a system unavoidably leads to a situation in which many producers with similar formal characteristics receive equal personal income, without regard to how much and how they actually work that is, this system leads to *uravnilovka* (Russian word), i.e. economically and socially unsound and unjust nivellization of personal incomes.

This is the basic reason why the financial stimulation of producers and other working people has not received to our very day bases wide enough for the assertion of all relative advantages of the socialist relations of production, including distribution according to work performed, in any socialist country. For this latter represents, both theoretically and historically, a higher form of stimulation than the distribution based upon labour power as a commodity.

The consequences of the insufficient stimulation of producers are, however, widespread and incalculable. The above described form of the realization of distribution according to work performed and the extensive nature of economic development, the

*I.e. the number of population able to work multiplied by an average daily working time and the available means of production expressed, as past labour, in labour terms (Translator's note).

slow increase of the productivity of labour, the low efficiency of the utilization of the means of production, the poor quality of products and many other factors that characterized every socialist country to a greater or smaller extent, and constituted one of the main reasons for the economic reforms, are not in a minor or partial, but in a significant and general correlation with one another. For this reason, there has been a widespread and sharp struggle against nivellization of that kind, in all socialist countries, ever since the policy of war communism and the era of the NEP (New Economic Policy) of the Soviet Union, till the actions taken during and after economic reforms of the mid 60's in all socialist countries, as it had been established very early, on the basis of the experiences, that *this was not a form of the realization of distribution according to work performed but its negation.*

This struggle, however, cannot be fought exclusively against the results, the forms of the deviation from distribution according to work performed; it is of secondary importance whether the differences are positive or negative, as the one involves the other. The reasons lie in the fact that the systems of distribution were not formulated according to the objectively necessary organization of economic life in the contemporary socialist countries, that is, quoting the "Capital" of Marx, not according to "the specific type of the production organism of the society and . . . the stage of the historical development of producers." This is the main reason why this system had to be and has to be abandoned, although in the majority of socialist countries some of its elements, including some essential ones, have not been eliminated up to now.

In the original system the principle of distribution according to work performed was asserted directly as a proportion of sharing in the social consumption fund. Under the circumstances of commodity production, however, such a relation, at least a direct one, is impossible. Because of the deviation of the personally expended labour and the socially necessary labour, the labour of the individual producer cannot provide a basis for sharing in the social consumption fund in its direct, natural form, as the volume of the socially recognized labour of the individual producer cannot be determined before the volume of the socially recognized labour of the commodity producing collective, in which collective the individual performs his work, has been determined.

In this way, distribution according to work performed, which would be originally restricted to the distribution of the personal consumption fund, is linked to the distribution of the gross national product (GNP), or more exactly, to that of the national income, representing the net volume of the former; at least in so far as the basis of appropriation cannot be but labour performed. The double interpretation of distribution according to work performed (relating partly to the national income and partly to the income of each organization and each producer) raises the question of the order of application. In this field considerable differences can be found among the different economic opinions and the practices followed by the different socialist countries. Such differences can be revealed even between the different periods of the development of each socialist country, especially after the economic reforms begun in the 1960s. In spite of the commodity producing nature of the economies, the majority of countries put the second aspect into

the focus (the interpretation concerning the personal income of individual producers), which involves the maintenance of the centralized system of wages. As this system cannot operate efficiently under the conditions of commodity production, almost all countries attempt to correct on the basis of other principles and certain countries (Bulgaria, Hungary, Poland, Czechoslovakia in the period 1967–1971) have, in fact, abandoned that principle, preferring increasingly openly the first interpretation. We shall present the implementation of the two interpretations in the chapters below.

Distribution according to work in the system of formal commodity production

The commodity producing nature of the socialist economy, an undoubtedly dominant opinion in current economic theory has not been accepted overnight, without scientific and social resistance, and this opinion has not been consistently asserted in all socialist countries. The former absolute rejection of commodity production has developed into the present acceptance through a great many intermediary steps, and economic practice has often kept its former economic substance under the guise of the new forms of economic control. In many socialist countries we find the following picture: there exist commodity and monetary processes, but the principal development fields of the national economy (structure of investments, prices, wages etc.) are often regulated with the exclusion of market criteria, or even against them. For this reason, these systems can be regarded as commodity producing ones only in form, as they maintain their centralized nature, their character based on directive, physical plans.

The formal commodity producing nature of the economy manifests itself also in the sphere of distribution. With the recognition of the necessity of commodity production under socialism the problem has arisen whether the distribution according to work can retain labour in its concrete, socially useful form as a basis, when the work expended on the production of individual products can receive its final social recognition only by acceptance or rejection of these products by the market in the course of exchange. In other words, acceptance of the commodity producing nature of socialism raised the question whether distribution according to work performed continues to mean a distribution on the basis of the concrete form of labour, according to its kind and duration or one according to the *socially recognized results* of labour.

Although the second version follows from the logic of commodity production itself, the first version has kept its dominant position in the practice of most socialist countries. This opinion is supported by the reasoning that there is no connection between distribution according to work and commodity production, that is, distribution according to the value produced by labour (and recognized by the market) cannot be a form of distribution according to work.

In this approach distribution according to work becomes practically separated from the entire economic activity of the producing units. The remaining part of the national

income is separated, withdrawn by society from the producers, and is channeled in various ways into the uniform funds for accumulation and social consumption (funds for health services, education, culture, art etc.) to be distributed by the state and its specialized organs among different purposes, activities and consumers. In such a system of distribution the basic question is to determine the surplus product each producing unit has to deliver to the community, i.e. the state. During this process, in order to stimulate the producing units to increase this part, their share the realized volume of surplus product is envisaged, although this is usually merely of symbolic character.

The problem of how to determine the volume of surplus product most often emerges in discussions about the historical form of the value of a commodity under socialism, more specifically, about the "normal" price type of socialist economy. Since, with the interpretation of distribution according to work performed based on the concrete (socially useful) labour, in the Marxian formula of the value of commodity, i.e.

$$p = c + v + s$$

not only all material costs, transferred value (c), but also the labour power, i.e. its economic magnitude (v) are given; by determining the surplus product (s) we get the price with whose application the obligations towards the community and their relative proportions are supposed to be based upon the principle of distribution according to work performed.

However, those holding this opinion concerning distribution according to work performed are not unanimous as to how the volume of the surplus product, or the obligations of the enterprise towards society should be determined. Some say that this volume should be determined, on the basis of the volume of labour power engaged, i.e. on the basis of the wages fund. They suggest to form prices according to the formula of the so-called value-type prices. Others say that the surplus product should be determined in proportion to the means of production tied up, so that the price type of the socialist economy be a kind of Marx's price of production, similarly to that in the capitalist economy. Others again say that the contribution of enterprises (branches) to the creation of surplus product should be based not on the total value of means of production tied up but on the effective costs only: means of production used up (c), and personal income paid (v). According to this concept, the price-type of the socialist economy should be a price of production somewhat corrected according to the above concept.

It is worth mentioning that this system of distributing the surplus product existed for some time in the Yugoslav economy as well, in its first and second version (the third one is but a modification of the second), and their combinations also existed in a certain form. Without treating in full the theoretical versions and practical applications of this system of distribution developed in Yugoslavia, we have to state that it suffers from a number of serious theoretical deficiencies. Approaching the concrete form by starting from the general, it is unacceptable, first of all, that this system regards labour under socialism as a directly social one. This opinion is nothing else but a remnant of the view

that socialist relations of production are not of a commodity producing nature. *The directly social character of labour and the commodity producing nature of production mutually exclude each other.* For this reason, while not denying that socialism has made a step forward towards directly linking the producing units (in so far as the profit motive of capitalists is no longer a mediator among them as the direct goal of production), it must be emphasized unconditionally that *labour is of an indirectly social nature under socialism as well, in the sense that it gains its final social recognition but on the market, by sale of produced goods as commodities.*

This conclusion, however, denies any such approach to the problems of socialist distribution which starts from the individual worker and his concrete, socially useful labour. On the market it is not the individual labour of the individual worker that emerges but combined labour of several producers performed in cooperation in different economic activities and pursued in different producing units (in enterprises or, in Yugoslav economic system, the organizations of associated labour). This labour contains not only the necessary labour but surplus labour as well, the total of newly added labour, i.e. the total of new value. In other words, the relation between necessary labour and the newly created value (income) is turned upside down in this system. Instead of incomes whose volume is determined by market criteria (as the difference of all revenues (sales) and all material costs), this system starts from the wages and determines the surplus product as a percentage of wages or that of the sum of wages and certain material costs or in some similar way. Then, by adding up the surplus product, material costs and wages, the concept arrives at the price of the product, which it declares for an economic law, that is, the price type of the socialist economy.

Such types of price and distribution are, in other words, not objective *economic measures* but *normative categories* derived from premisses by way of a *a priori* constructions not reflecting reality. It is, therefore, not surprising that practice does not verify such systems and their overall effects are negative.

As regards prices, these effects manifest themselves in differences between the prices thus determined and those which would result from actual conditions of the given economy, with full regard also to supply and demand. Thus, the lasting shortages and surpluses of certain products are regular concomitants of every traditionally organized socialist economy. The most significant disproportions can be found between the prices of means of production and consumer goods (between 1926–27 and 1965, prices of light and food industry in the Soviet Union increased 15-fold, retail prices ninefold, while heavy industrial prices only 1.4 times [6], but relative prices are not realistic even within these groups, so they have to be adjusted at times.*

*For lack of space, we cannot deal here with the striking differences between domestic and world market prices, reflecting the unreality formed in the above-described manner. Because of these differences, almost all socialist countries have considerable difficulties in selling their products on the world market, at terms entirely independent from their internal conditions. Apart from Yugoslavia, where world market prices are an official economic policy criterion for the determination of internal prices, it is only Hungary that follows, recently, a system different from the one described above.

In distribution the negatives effects of such system manifest themselves in continued nivellization of personal incomes, deriving from the fact that work is regarded as the basis of personal income in its concrete form, and most often not the one actually performed, but a supposed amount of work is taken into account, independently of the producing unit where it is performed, and of the results of this unit. From such a distribution it necessarily follows that producers and producing units are indifferent to improving their activities, as the starting premises of the system isolate distribution from production*, so there is no, or only a symbolic, connection between the results of production and the financial position of producers or producing units.

The fact that this is not a speculative conclusion but reality is proved by the experience in the Soviet Union where, for a very long time, sharing from the profits of the enterprise (from the surplus product computed by a version of the price of production) amounted to only 3.5 per cent, thus limiting not only independent economic ventures but the material stimulation of the workers as well, rendering these practically symbolic. After the 1965 economic reform this was pointed out by Soviet economists as well. "Until the transition to the new system of planning and economic stimulation (introduced by the reform — A. V.) the main source of paying bonuses was the wages fund of the enterprise. A part of the *enterprise fund* (the fund managed unrestrictedly by the enterprise — A. V.) was used for this same purpose. However, in industry half of the enterprises were unable to create such funds, and where such funds did exist, the size of the fund did not allow a massive and efficient stimulation of producers. For example, in 1964 within the average monthly wages of 100.5 roubles of industrial workers the bonuses from enterprise funds amounted to 0.13 roubles." [8]

In relative terms, this means that the contribution of bonuses from enterprise funds was a mere 0.13 per cent of the average wages of industrial workers, which was, indeed, totally insufficient for a distribution according to *socially recognized, as against supposed labour*.

This, indeed, points out that such distribution is not a form of distribution according to work performed, but it resembles in its principal characteristics, i.e. the predetermined sharing of producers in the social product, from the theoretical aspect of political economy the capitalist system of distribution, under which the share of the labour power in the social product is predetermined by the value of labour power, and

*This was pointed out by G. Lisichkin, too. Treating material stimulation in industry, he wrote: The system of material stimulation is constituted here by the bonuses given for the fulfilment and overfulfilment of plans for the reduction of prime costs, those of the production, for the improvement of quality of products and for the achievement of the planned profit etc. There are a great number of solutions for stimulation. These stem from the striving to call the attention of economic managers to the importance of the thorough and technically imperfect solution of a given, actual problem. But these solutions of stimulation answer only the requirements of a specific task. In production, however, success depends on the harmony of all factors. And here the whole, complex system of stimulators gets into conflict with life. One begins to work against the other, which only aggravates disproportions." [7]

thus it is independent from the results of production. However, the fact that the overwhelming part of surplus labour will be utilized for the satisfaction of the needs of all workers and the whole of the society through common consumption and accumulation funds, and not of a single class, shows that the resemblance is formal, not intrinsic and the conditions are of a socialist, not of capitalist nature.

Although not uniformly, the above described system of distribution was critically evaluated in the course of the preparations for the economic reforms of the socialist countries (a difference emerged from the fact that the concentration of means to serve accumulation and common (public) consumption into state funds was not regarded as an alienation of these means from the producers.) (See e.g. [9]). Steps have been taken in almost every European socialist country for an improvement of the system of distribution since the beginning of the 1960s. With the exception of Poland, where, according to the directives of the Sixth Congress of the Polish United Workers' Party in December, 1971, the wages fund is now determined as a function of the economic achievements (total revenue) of the enterprise, the socialist countries remained within the *limits of the technical and quantitative improvement of the existing system*. Importance of the scope of improvement of the system, i.e. increased sharing in the profits of the enterprises, increased proportion of bonuses within the total incomes of the producers should not be underestimated, the less so, as these changes dwarf all those made earlier in the course of many years. However, the maintenance of the theoretical premisses of the former system of distribution, as well as the keeping of its main instruments, first of all, of the *wages, profits and turnover tax* (the last of which is gradually replaced by the charges on fixed assets) as the *three equally important income sources of producers, enterprises and the state*, testify that the above treated deficiencies have, on the whole, survived. For this reason, in our opinion, this system cannot be regarded under the conditions of socialist commodity production as a theoretically consistent and socially acceptable form of distribution according to work performed even in its present, modified, form.

Distribution according to work performed in the system of socialist commodity production

The most general methodological deficiency of the above concept is that, under the conditions of an economic system regarded as a system of commodity production, it takes labour in its concrete, socially useful form for the basis of distribution according to work performed. This renders the whole concept, already at the highest level of abstraction, contradictory. If the system is actually, and not only formally, of a commodity producing nature, then the basis of distribution can be provided only by the socially acknowledged results of labour. And since, under the conditions of commodity production, the results of labour take the form of commodities, this basis cannot be else but the value created by labour (recognized by society on the market). Any other conclusion is a *contradiction in terms* as the application of the law of value for the determination of the

mass of goods society disposes of, and the simultaneous application of the direct form of labour as a basis for the distribution of the social product might mean the quantity to be distributed is greater than the quantity available, which is absurd and, consequently, untenable.

The unacceptability of the concept manifests itself at a lower level of abstraction in that it applies as starting elements such categories of distribution (personal incomes, wages) that are not given objectively by the functioning of the economy as a system of commodity production. It is a fault of the concept, in all of its varieties, that it regards the necessary product (v) as given, without determining first the social position of producers in the system, and the social character of labour (its qualitative characteristics) and without providing a theoretical basis for the quantification of v . As against capitalism, under which the division of the newly created product (income) into necessary product (v) and surplus product (s) is well founded as it reflects the social polarization of the functions of production and the management of production between the classes of producers and capitalist, in a socialist economy such a division is theoretically unfounded and essentially arbitrary.

In other words: under conditions of capitalism v can be regarded theoretically as a quantitatively determined magnitude, since labour power is a commodity and, as such, it has a price. In socialism, however, the general opinion is that the situation is different; consequently, the elements are not given in theory on whose basis the necessary product could be economically determined as a given quantity *prior* to the production process and the realization of its results, as it does not emerge as a socially separated category. By this it is not implied that the part of national income serving personal consumption cannot be empirically determined in all countries at a given moment of historical development, together with the average personal income as a quotient of national income and the number of employed. However, as much is beyond doubt that when society operates as a veritably commodity producing system, the personal income (v) is not *a priori* given as opposed to the national income, but it is a function of the latter, i.e. the difference between total sales (total revenues) and total material costs (including productive services costs).

Under the conditions of socialism the functions of the owner of the means of production are practiced by the producer himself, and thus it is he who decides on their utilization and disposes of the results of labour, and within it, of the part serving the purpose of the expanded reproduction, it is obvious that the necessary product (v) and the surplus product (s) are not *a priori* divided and they emerge as parts of the whole income. Consequently, the notation ($v + s$) can be used only for the purpose of comparison with capitalism. At the first, most abstract level of the analysis neither v , nor s exist as independent economic quantities; they are but parts of a whole ($v + s$) thus, the personal income (v), that is, wages, cannot be regarded as the starting element of the system of distribution.

The counter-arguments against the concept regarding the commodity-producing character of socialist economy as being but formal also point to the direction of positive conclusions. Insofar as socialist economy really operates as a commodity producing

system, the basis of sharing in the social product cannot be labour in its concrete, socially useful form, but only the socially recognized result of labour (the size of value recognized on the market as socially useful).^{*} However, as in socialism commodity is not the product of individual labour, the work of the individual does not appear as socially independent, but achieves social acknowledgement only through the mediation of the commodity, and this product is, in turn, the result of individual labour performed in, and aggregated by, several producing units (enterprises). For this reason, the primary subjects of distribution in socialism are not the individuals but the economic units as commodity producers.

The character of the basic subjects and their relation to one another also determines the starting elements of distribution. As the relations of the producing units as economic subjects are based upon measures set by the market, i.e. they are relations between buyers and sellers, the starting element of distribution is constituted on the one side by the total value (or price, amount of money) realized through the selling of commodities produced and by the total costs allocated for production in the producing units on the other side.

As an economic result of their activities the difference between these two factors, i.e. the income emerges. Thus, under the conditions of a socialist commodity production the basic and primary category of distribution is income; consequently, we call this socialist form of distribution, based upon the commodity producing character of socialist economy, an income system.

Division of income into funds, firstly, into funds for personal incomes and funds for internal production (accumulation), is determined within the producing, i.e. the economic unit (in Yugoslavia — the organization of associated labour) as the subject primarily appropriating the income. Beyond the above-mentioned funds, there are others, similar in use to one or the other of the above two funds, which are managed in combination with, or separately from them. This division is effected, in principle, independently by the producing units on the basis of the decision of the producers creating the income. On the basis of the experience of Yugoslavia it may be stated that, in the interest of a balanced and stable economic development, the framework and criteria of distribution must be regulated socially by all means. This has been in force since 1972 through social agreements and self-governing settlements. Distribution of the personal income fund is effected only after the above primary division of the income, which proves that personal income is, under the system of socialist distribution, not a primary, but a derived category.

As the same producers determine what part of income should be allocated to the expansion of the material basis of their activities, the distribution of income and of

^{*}Recently some Soviet economists have also voiced such opinions. One of the best known of them, late S. G. *Strumilin*, member of the Academy, wrote already fifteen years ago: "The principle of socialist distribution is proved by the remuneration of labour according to its results, and with this the achievement of the highest productivity is stimulated. This principle secures for all workers wages proportionate to the quantity and quality of their work, or, in other words, wages proportional to the value created under uniform conditions, so each worker gets an identical proportion of the value created by him." [10]

personal incomes attaches functionally to the production process and to the entire activity of the enterprise. This makes the producers interested not only in their own personal income but in the total income (from which the former will be paid), thus also in the part of income which will be put into enterprise funds (accumulation). In this way, the former isolation of the distribution of personal incomes from the operation of production processes and their results is eliminated and becomes an organic part of the social reproduction process. By their very position, it becomes a vital interest of the producers and producing units to develop their economic activity.

Finally, when the contributions to be made to the satisfaction of general social needs are determined on the basis of incomes and the derived personal income, and when the utilization of the means thus created is jointly determined by all those interested, then the distribution of incomes and personal income will be logically linked to the creation and utilization of the means of common consumption. In this sphere the role of labour is different from that in the sphere of material production and the distribution of personal income, as it is only the basis of sharing but not its measure (e.g. in social security), and sometimes it is not even a basis (e.g. in the case of different legally provided social bonuses).

Still, even this segment remains within the system of incomes, i.e. in the framework of distribution according to work, under the conditions of commodity production, in three senses:

Firstly, the income created in material production constitutes a framework: the forms of consumption concerned must move within it, simply because no society can spend more than it produces.

Secondly, the general framework of the system, together with its social characteristics, determines the principles on whose basis the segment concerned is linked to the sphere of material production, furthermore, it determines the bases of its internal relations, also of the relations among people working in this sphere.

Thirdly, the volume and the modes of the distribution of the means of common consumption must be determined so that they should not endanger the distribution according to work, the basic principle of the distribution system of socialist society.

The deviation in this sphere from the principle of distribution according to work cannot aim at contravening the principle itself: the basic aim is to level the conditions of keeping and acquiring the ability to work, especially as regards the new generations, as well as the correction of distribution according to work necessary because of factors acting from outside of the material production (size of the family, health etc.). Consequently, this sphere creates a bridge between distribution according to work and the future distribution according to needs.

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РАСПРЕДЕЛЕНИЕ ПО ТРУДУ И ТОВАРНОЕ ПРОИЗВОДСТВО

А. ВАЧИЧ

Принцип распределения по труду, согласно предположению Маркса, должен был бы осуществляться в социалистическом хозяйстве, отрицающем товарное производство. Это предположение, однако, противоречит реальной действительности современных социалистических стран. В статье автор рассматривает проявление и способы решения этого противоречия в трех основных формах социалистического хозяйства. Первой формой автор считает натурально-плановое хозяйство, наиболее характерным выражением которого была экономика т. н. военного коммунизма, существовавшего в Советской России в 1918–1921 гг. Вторую форму автор называет формально-товарным хозяйством, так как в ней существуют товарно-денежные процессы, но развитие экономики регулируется нерыночными критериями. Распределение же по труду означает здесь распределение по затратам конкретного труда, а не по общественно-признанным результатам труда. Эта форма господствует во многих социалистических странах. Наконец, при третьей форме, называемой автором системой социалистического товарного хозяйства, основой распределения общественного продукта служит не труд в его конкретной, общественно-полезной форме, а его общественно-признанный результат – стоимость товара. Но поскольку при социализме товар является продуктом не индивидуального труда, а кооперативного труда работников, объединенных в рамках определенных хозяйственных единиц (предприятий), то и первичными субъектами социалистического распределения выступают не индивиды, а хозяйственные единицы как товаропроизводители.

W. FELLNER

SCHOOLS OF THOUGHT IN THE MAINSTREAM OF AMERICAN ECONOMICS*

In the history of economic theory it is usual to distinguish between schools of thought. Indeed, that distinction serves as the most usual central theme in the analysis of the evolution of economic theory. Yet it is difficult to decide to what extent the concept of schools of thought has retained its relevance for the interpretation of influential views in the contemporary Western scene—particularly in the United States. This paper will limit itself to views and approaches usually regarded as belonging in the mainstream of American economic thought.

I. Neo-Keynesianism, monetarism and the time horizon

At first one is tempted to draw a sharp distinction between neo-Keynesianism and monetarism and to regard economists usually counted in these two groups as representing different schools of thought. In the present paper I will submit two propositions concerning this way of drawing the distinction. One of these is a negative, the other a positive proposition.

My negative proposition is that if neo-Keynesianism and monetarism are to stand for types of analysis which can be reasonably described by these two labels, then by now it would be very awkward to try to draw a sharp line between them, let alone to consider them rival "schools of thought."

The positive proposition to be presented here is the following. Some economists whose views belong in the mainstream of Western economic thought base their analysis on the assumption that a consistent and reasonably steady long-run oriented policy attitude will make the short-run behavior of market participants fall in line with expected long-run results—provided market forces are allowed to manifest themselves freely enough. Those usually counted among the monetarists *tend to be* long-run oriented in this sense. Other economists, who have remained very influential, either state or at least imply in their analysis that a direct-policy concern with the results obtained in successive short periods is needed for ensuring a satisfactory long-run outcome of the economic process. Those usually regarded as neo-Keynesians *tend to be* short-run oriented in this sense. It is the distinction between long and short-run orientation that comes nearest to qualifying as a distinction between influential schools of thought in the contemporary Western scene.

*The ideas expressed in this paper served as the basis for a lecture presented in Budapest to the Hungarian Economic Association in April 1977.

The overlap between long-run orientation and monetarism and that between short-run orientation and neo-Keynesianism are, however, far from complete. While incomplete, these overlaps are nevertheless large enough to lend importance to the question of why they exist. Only to the extent that these overlaps do exist, that is to the extent that a "monetarist" is long-run oriented and a "neo-Keynesian" is short-run oriented in the foregoing sense, does a sharp distinction between "monetarism" and "neo-Keynesianism" make good sense. Only to that extent does the distinction between monetarists and neo-Keynesians run parallel to one that deserves to be drawn sharply and that defines orientations in the nature of "schools of thought."

II. Money aggregates and interest rates

Monetarism, if the label is not to be outright misleading, must describe a type of analysis placing particular emphasis on the role of the supply of and the demand for money in determining the outcome of essential economic processes. The role Keynes had intended to attribute to money supply and demand in the *General Theory* is a legitimately controversial question. [1] But it is a fact that he left room for building models on the assumption that as a result of a practically "infinite" interest-elasticity of the demand for money the role of the *money aggregates* is negligible, while that of the *fiscal variables* is substantial. Whereas he also left room for other assumptions, influential experts of the early post-Keynesian era often regarded the role of the money aggregates as unessential. It is, however, a fact also that this particular application of Keynes's analysis has become a matter of the past. For some considerable time now, the neo-Keynesian approaches have attributed a substantial role to the supply and demand of money as well as to fiscal policy. The statement that monetarists place more emphasis on the role of money aggregates in demand management than do the more fiscal-policy minded economists regarded as neo-Keynesians nevertheless does point in some sense in the right direction, but such a statement is too vague to serve as the basis for a hard and fast distinction. Also, the gray area between almost exclusive emphasis and no emphasis on these aggregates is much more densely populated by professional writings than is the neighborhood of the two extremes.

As for the difference in the emphasis placed on money supply and demand, this is nevertheless noticeable, even though one should not try to build a hard and fast classification on it. For example, monetarists, when forced to use a simplified apparatus for obtaining a rough and ready approximation of the money GNP are apt to rely on some simple relation linking directly the money supply to the money GNP. These money-to-GNP relations may include an allowance for the dependence of velocity on a small number of other variables such as interest rates and the level of real activity (say, the real GNP). Alternatively the money-to-GNP relations employed may include an allowance for a trend in velocity, though as concerns the period since the early nineteen-sixties in the United States, the GNP-velocity of M_2 has not shown much variation

about a value approximately 2.4. [2] Neo-Keynesians are mostly very skeptical about such relations. Whereas there exists a monetarist inclination to use such relations in a search for first approximations, monetarists would not deny that a much more complete apparatus would be needed for arriving at quantitative forecasts which would deserve much confidence. What monetarists are inclined to deny is that neo-Keynesians and other economists who use more complex models would have been successful in developing a sufficiently dependable apparatus of a more ambitious kind. This then reduces to the question whether one should use a relatively simple formal monetarist apparatus as a point of departure before making ad hoc (somewhat intuitive) adjustments, or follow the neo-Keynesian inclination to be more ambitious on the formal level — a matter of methodological preferences, but hardly a difference between “schools of thought.”

Another difference is related to the one just discussed. While infinite interest-elasticity of the money demand has long ceased to be a possibility stressed by economists writing in the Keynesian tradition, their implied assumptions concerning the relationship between this interest-elasticity and the interest-elasticity of expenditures on goods are nevertheless different from those of monetarists. In good part this difference reflects the tendency toward short versus long-run orientation of the two groups, respectively, to which I will return in the next section, but something else is also involved. Neo-Keynesians are inclined to appraise the effect of a change in the supply of money on expenditures and thus on the money GNP by the influence of the change of money supply on interest rates; and they are apt to conclude that if interest rates do not react much then the change in the money supply will have no substantial effect on expenditures. The implication here is that if interest rates do not react much, then an increase in the supply of money increases largely the idle deposits of the public (reduces velocity) at merely slightly lowered interest rates, and that in such circumstances a decrease in the supply of money diminishes largely the public's idle deposits (raises velocity) at merely slightly higher interest rates. The conclusion is valid only if in the given circumstances the numerical value of the interest-elasticity of the demand for money is high and the corresponding interest-elasticity of expenditures on goods is low. On the other hand, the monetarist emphasis on the role of the money aggregates *per se* in determining expenditures — the importance of this role regardless of interest-rate effects — implies that a small change in interest rates in response to a changing money supply merely demonstrates that little change in interest rates is required for raising or reducing expenditures when the money aggregates are increased or reduced. This view is valid if the numerical value of the interest-elasticity of the expenditures on goods is generally high. A brief explanation is needed of why this problem leads over into a discussion of short versus long-run orientation.

There is wide agreement among economists that the numerical value of the interest elasticity of the expenditures on goods is appreciably higher in the long than in the short run. This is another way of saying that it takes time for the public to decide on what goods it will spend any additional amount of money created by the monetary authority. Hence, to some extent the difference between the implied elasticity assumptions of

monetarists and neo-Keynesians reflects long versus short-run orientation. But aside from this, it is also true that monetarists are more apt to commit themselves to the hypothesis of a practically infinite negative *long-run* interest elasticity of expenditures on goods — thus to the hypothesis of a horizontal Hicksian long-run IS curve — while belief in this “strong” hypothesis is not typically shared by neo-Keynesians even for the long run. For this reason the difference between the monetarist emphasis on the direct role of the money aggregates in determining nominal demand and the neo-Keynesian emphasis on indirect monetary effects via interest rates is not entirely a difference between focusing on the long versus the short run. But the difference is very largely that:

III. Fiscal policy

The neo-Keynesian inclination to base demand management largely on ad hoc adjustments of fiscal (budgetary) variables to the changing economic outlook rather than on regulating money aggregates is clearly a matter of short as against long-run orientation. It needs to be pointed out, in the first place, that the demand-effect of fiscal policies expresses itself mainly or exclusively in the short run. But this does not rule out these policies from consideration in the long-run analysis, because no one would deny that repetitive short-run disturbances could vitiate (suppress) long-run tendencies. What does not fit into the long-run oriented approach is the conception that the fiscal variables need to be adjusted more or less “currently” to the changing economic outlook. These statements need to be explained in somewhat greater detail.

In explaining these statements we begin by a clarification of the proposition that fiscal policy exerts its demand effect mainly or exclusively in the short run. Most forecasting models with basically neo-Keynesian characteristics show a significant diminution of the cumulative “real” fiscal multipliers with the passage of time. Indeed, a more general inspection of practically any apparatus used for the analysis of these problems strongly suggests that as time progresses the cumulative nominal expansionary effect of fiscal policy will be absorbed (offset) increasingly by rising prices since expansionary fiscal policies raise interest rates and beyond some point the private sector will not produce the additional goods for which the additional money incomes are creating demand. The difficulty so described may not develop “up to some point” to which higher utilization rates may induce more investment and more private output in spite of the interest-raising effect of fiscal injections, but this is a short-run effect. It is therefore not astonishing that practically all models should point to an increasing subsequent offsetting by price increases of the initial *real* expansionary effect of fiscal policy.

The initial *nominal* effect — current-dollar effect — of fiscal expansion will not tend to be offset by the subsequent price-movements but, even in nominal terms, successive expansionary fiscal moves of given size must be expected to generate less and less additional demand. This is because, as a tool of demand-management, pure fiscal policy works mainly through interest-rate effects — through a velocity-raising effect of higher

and a velocity-reducing effect of lower interest rates* – and given the productivity of capital the long-run effect of fiscal security purchases and sales on real interest rates cannot be very significant. Indeed, on monetarist assumptions the long-run interest effects of such transactions must be negligible, though the short-run effects may, of course, be substantial. Here again the qualification needs to be added that up to some point expansionary (or contractive) fiscal policy moves may exert an influence on expenditures not by way of interest rate effects but by changing the capacity utilization rates and thus inducing more investment (or deterring some amount of investment), but here again this qualification is clearly of short-run character.

Hence fairly wide agreement exists on the validity of the proposition that fiscal policy affects demand primarily in the short run.** Yet it is important to add that attitudes toward fiscal policy disclose also fairly wide agreement on the need for safeguards against the perpetuation of short-run difficulties which would interfere with the realization of long-run tendencies. Whereas economists oriented toward the long run are unsympathetic to reliance on discretionary fiscal-policy moves, they almost invariably recommend allowing the built-in stabilizing effect of the budget to come through and thus to allow the budget to move toward deficits (or lesser surpluses) in times of expansion.

Therefore, emphasis on the long run, and the belief that a consistent long-run oriented policy will have the needed effect also on the short-run behavior of market participants, has both of the following implications: (1) that market forces should be allowed to manifest themselves freely enough, and (2) that government policies which inevitably affect short run outcomes should avoid interfering with the evolution of the successive short runs toward the prospective long run on which the policy focuses. Awareness of this does call for concern with short-run tools of demand-management, including the fiscal tools, even in analysis focusing on the long run. Yet in the framework of a long-run oriented policy this concern expresses itself in setting the fiscal variables appropriately and for leaving them set without reliance on successive "discretionary" adjustments of these to which market activities cannot be geared ahead of time. A short-run oriented policy, on the other hand, favors adjusting the tools of short-run demand management to frequently changing economic prospects as seen by experts whose predictive powers are, however, very limited.

*Assuming a finite interest-elasticity of the demand for money, the higher interest rates corresponding to larger fiscal spending (that is, to larger fiscal deficits or to lesser repayments of government debt) reduce private investment. But as concerns aggregate expenditures, this negative effect is outweighed by the fiscal expenditures themselves, provided that (given the supply of money) the income velocity of money is higher at high than at low rates of interest. The effect of interest on velocity reflects the fact that it is more tempting to economize on money balances held per unit of aggregate expenditures if interest rates are high than if they are low. Furthermore, as explained in the text, given the positive fiscal effect on aggregate expenditures, the negative effect on private investment may also be *temporarily* suppressed by higher capacity utilization rates which may induce more investment in spite of the higher interest rates.

**This agreement extends to authors whose contributions have been made largely along "Keynesian" lines. See [3]

IV. Conclusions concerning an overlap

We may now briefly summarize our conclusions concerning the overlap between monetarism and long-run orientation, on the one hand, and neo-Keynesianism and short-run orientation on the other. The overlap exists because when compared with monetarists, neo-Keynesians place less emphasis on monetary policy and more on fiscal policy — a short-run tool of demand management. Yet the overlap is partial because even in the framework of a long-run oriented approach it is recognized that setting the fiscal variables appropriately is essential *inter alia* for demand management in order to prevent creating short-run disturbances which would interfere with the realization of the long-run results aimed for by the policy. Even within a long-run oriented approach this is recognized, and it is recognized with more or with less emphasis depending on the author. Thus an author can adopt a long-run oriented approach without rejecting all essential neo-Keynesian insight on the role of fiscal policy in demand management. The important distinction is that between (1) an orientation toward the long run by a consistent policy to which short-run market behavior is expected to adjust itself and (2) an approach implying that appropriate *ad hoc* adjustments of the policy variables by the authorities are needed in the successive short runs, to allow an acceptable long run to evolve from the short runs so shaped. It is possible to take the first of these points of view and yet to pay quite a bit of attention to the fiscal-policy implications in building one's analytical apparatus, though even in this case one will be opposed to attempts at fine tuning through successive adjustments of the fiscal variables to short-run prospects.

In actual fact, a good deal of "shading over" of views is observable on the matter of monetary versus fiscal policy, even if those engaged in long-run oriented analysis show a tendency to be on guard against the neglect of the role of money supply that characterized much of the work of Keynes's followers in the earlier post-Keynesian phase. There is much more nearly a fundamental distinction — we may call it a distinction between schools of thought — on whether markets should be allowed to adjust to a reasonably steady and predictable long-run course of monetary and fiscal policy or whether policy should attempt to direct the successive short runs.

It is my conviction, and by now probably the conviction of an increasing number of economists, that approaches involving the shaping of successive short runs by policy adjustments have proved a failure. Thus it is my conviction that the survival of market economies in the West depends very largely on the ability of policy makers to take a steady and reasonably predictable long-run course, leaving markets enough freedom to allow the public's short-run behavior to adjust to the expected long-run course of events. Both the economic and the political future of the Western countries hinges on whether authorities whose fate depends on the behavior of voters in frequently held elections will have the desire and ability to stage such a reorientation toward the long run. This is indeed a question. The specific difficulties are not the same in the different countries of the West, nor is the outlook for overcoming them the same. I will continue and end my paper with an attempt to articulate this problem with present circumstances in the United States in mind.

V. Problems behind a crucial American policy controversy

In the United States the numerically specified unemployment-rate target has proved the main inducement to short-run orientation and therefore the main stumbling block of economic policy. In this section we shall see that it is impossible to give an interpretation in terms of essentials of the unemployment rate as it is measured in the United States. On the other hand, it is possible to arrive at a clear and reasonable interpretation of another measure of the employment situation – the employment-to-population ratio – but the trends in this other measure point in a direction very different from that in which unemployment rates do.

With reference to conditions in the mid-fifties the unemployment rate target was defined several years later as 4 percent – a rate then described as the measured unemployment rate corresponding to “full employment.” Indeed during the nineteen-sixties the 4 percent overall unemployment rate was frequently referred to as an interim target on the way to more ambitious targets. In retrospect it is very questionable, however, whether even in the mid-fifties the 4 percent rate could have been achieved for any length of time. Even in those circumstances achieving such a goal would probably have required the temporary and subsequently boomeranging stimulus provided by accelerating inflation. Even then the measured overall unemployment rate corresponding to a sustainable level of activity was probably a good many decimal points higher than 4 percent. [4] Since that time conditions in the labor market have changed significantly, and the same labor-market tightness which in the mid-fifties existed at measured unemployment rates of between 4 percent and 5 percent has come to establish itself at rates that are quite a bit higher.

Yet the main point here is that no one can make an acceptable estimate of the “proper” rate, and attempts to specify such a rate in a politically attractive fashion must be expected to lead to chasing a target by creating a substantial degree of inflationary instability. Sooner or later this would have to result in far-reaching institutional changes. A program directed to politically “pleasing” unemployment-rate targets *could* be considered an *economically short-run oriented element of a politically long-run minded approach* if the advocates of the program found room for an analysis of the institutional changes, including changes in the political arrangements, which would result indirectly from the inflationary instability that is generated. But in fact the advocates are silent on this precarious problem about which it would be difficult to claim foresight, and this is the reason why the entire approach must be regarded as focusing on short-run sequences.

To understand the problem of unemployment-rate targets we must first take a look at the method used for measuring the American unemployment rate. This method rests on a sampling of households each month. The method involves questioning a member of each household in the sample concerning the labor-market status of all sixteen-year old or older members of the household. A household member having no work outside the household itself (a nonworker) is regarded as unemployed if he or she meets one of the following two conditions: (1) he or she was available for work during the survey week

and was looking for a job some time during the past four weeks, or (2) he or she will report back to work during the next four weeks. Hence the appraisal of the results of such a survey depends very greatly on how much meaning we are willing to attach to the statement that a specific proportion of those not employed or self-employed is "unemployed" and that the remaining nonworkers do not belong in that category. The fatal weakness of the procedure is that the criteria used for deciding this are exceedingly vague.

For example, even the present, historically high measured unemployment rate of about 7 percent results from about 42 percent of the civilian population aged 16 and over not being employed or self-employed, and from only slightly more than 10 percent of those nonworkers — 4.3 percent of the population — being counted among the unemployed. The 4.3 percent of the civilian population which is thus counted as unemployed amounts to about 7 percent of the civilian labor force, where the labor force is defined as consisting of those who are at work plus those counted as unemployed. The bulk of the nonworkers is not counted as unemployed but is regarded as "not in the labor force."

Hence, the unemployment rates shown by recent surveys reflect very largely the methods by which at present approximately 10 percent of those not employed or self-employed are classified as "unemployed" and thus as having different characteristics from those nonworkers "not in the labor force." The fact that, according to information collected from a member of a household, a nonworking member of that household made some move during the past four weeks which can be described as "looking for a job" provides merely very shaky evidence for the decision to place him in the category of the "unemployed." Yet it would be difficult to collect dependable additional evidence. We have practically no information concerning the terms on which the "unemployed" would be willing to accept work, nor on whether they have been offered jobs which they rejected. The legal provisions do require that a person receiving unemployment compensation be available on reasonable terms for a job which is in his neighborhood and which is suitable in view of his training and experience, but this provision is known to be administered leniently. Further those counted as unemployed include a considerable number of persons without a job record that would as yet qualify them for unemployment compensation.

We know practically nothing about the intensity with which those looking for a job were looking for it. On the other hand, more dependable information is available on the following: Whereas at the present time, when we find ourselves somewhere between the past recession level of early 1975 and the next high point of the business cycle, the measured unemployment rate is roughly 7 percent — a distinctly higher rate than that observed at comparable stages of past cycles — the employed proportion of the population is very close to 58 percent and this is a *historical high* for such a stage of the business cycle. Indeed the employed (plus self-employed) proportion of the population, defined as the employment ratio, is at present somewhat in excess even of the level observed for the cyclical peak year of economic activity in the mid-fifties. From this it follows that the worsening of the record in terms of the measured unemployment rate is *wholly the result of the fact that a higher proportion of the nonworkers is classified as unemployed*. The

increase in the unemployment rate took place despite a *decrease* in the proportion of the population which is not holding a job.*

At least one essential reason for this "paradoxical" development can be easily explained. The weight of adult women (aged 20 and over) in the civilian labor force has been increasing at a spectacular rate. From 1956 when the measured unemployment rate was 4.1 percent to the present their weight rose from 29.4 percent to 36.7 percent and the rise is continuing. A very high share of this increase reflects itself in an increase in the employment-to-population ratio of adult women. At the same time a small share of the large increase expresses itself in an increase in those adult women who are counted among the unemployed because they do not yet have a job but are looking for one in the sense required by the definition of the concept of unemployment.

From the beginning, women have had higher specific unemployment rates than men — for adult women this seems to be exclusively the consequence of the fact that there are more new entrants and re-entrants into the labor force among them than among adult men [9] — and hence the rise of the weight of women in the labor force would in any event have led to higher overall employment rates. A new entrant or re-entrant into the labor force will normally be "looking for a job" before getting it, and hence will normally pass through a stage of "unemployed." Superimposed upon this we now find a rise in the specific unemployment ratio of adult women, along with a significant rise in their employment ratio, as a result of the fact that only most but not all of the continuing rise in the labor-force participation rate of women has so far expressed itself in more employment.

Teenagers of both sexes have also increased their weight in the labor force appreciably, showing a rise in their employment ratio as well as in their unemployment rate, but here the rise in unemployment rate is much more significant relative to the rise in the employment ratio than in the case of adult women. The difference is likely to reflect largely the consequences of minimum-wage legislation. Superficially this legislation gives the appearance of protecting the low-paid workers but it causes unemployment among them and it essentially protects the highly organized elements in the labor force from competitive underbidding by others, prominently including the young. Even aside from this, "having looked for a job some time during the past four weeks" is a particularly vague concept when applied to teenagers.

The employment-to-population ratio of adult men, on the other hand, has been *decreasing* over the past quarter-century and this reflects an increase of the proportion of those adult males who remain outside the labor force. Along with their decreasing employment-to-population ratio we observe also a declining tendency in their unemployment rate, except that this tendency is apt to become reversed to some extent during the present cycle whose peak has not yet been reached at this writing. This post-1973 phenomenon may well be a consequence of a very significant recent extension of the unemployment compensation system both in coverage and in duration of compensation payments.

*On this see [5, 6, 7, 8]

On balance, for all labor categories jointly considered, we thus observe an increase in the measured unemployment rate resulting from more of the nonworkers having become included among the "unemployed" – a fact that weighs more heavily in the computation of the unemployment statistic than does the diminution of the ratio of those not having a job to those who do have one. Behind this phenomenon we observe a significant increase in the labor force participation rate of specific labor categories, particularly of adult women and teenagers. In general, the criteria for including some proportion of the nonworkers among the unemployed and not including others are very vague; yet an exploration of specific labor categories strongly suggests that considerable significance attaches to the fact that adult women have had a steeply rising labor-force participation rate and also a steeply rising employment-to-population ratio, with not *all* of the rise in the participation rate expressing itself in a *simultaneous* rise in employment. Besides, women among whom there are in each period many new entrants and re-entrants into the labor force had a relatively high measured unemployment rate even in any initial period used as a standard of comparison. The trends observed for other labor categories support the same kind of interpretation, leading to the conclusion that the rising tendency in the overall employment ratio is a "harder" observation than the rise in the measured unemployment rate.

It follows from this analysis that entrants and re-entrants into the labor force, who are almost certain to be included temporarily in the unemployment statistics as this is computed in the United States, make up a weighty component of our total unemployment. In fact, even at the present time entrants and re-entrants make up between 40 and 45 percent of the unemployed, those who have left their last job another 12 percent and those who have lost their last jobs only the remainder (with those on "layoff" amounting to about one-fourth of the job losers). Even recently more than 40 percent of the unemployed have been without work for less than five weeks, and the average duration of unemployment is about fourteen weeks.

Among the structural factors it is noteworthy also that the proportionate representation of blocks in unemployment is twice their representation in employment but this has been so for a long time.

VI. Conclusions concerning problems behind the policy controversy

The main lesson from our analysis is that the dividing line between those nonworkers (individuals not employed or self-employed) who are included in the relatively small subset called "unemployed" and those nonworkers who are not included is not only inherently hazy but has become particularly difficult to interpret as a result of various institutional developments over the past quarter of a century. The weight of adult women and of teenagers of both sexes in the labor force has greatly increased; the high proportion of new entrants and of re-entrants into the labor force produces high measured unemployment rates for these groups even if their weight in the labor force remains unchanged, and in addition to this we are faced with the consequences of lags

between many more women "wanting" a job (on unspecified terms) and all of them actually getting a job. We are faced also with the consequences of minimum-wage legislation for the employment of teenagers who have come to account for a higher proportion of the population. Last but not least, during the past few years the extension of the unemployment compensation system made it a reasonable decision for many more persons with work experience to be more patient and selective in their search for a new job. Accordingly, even at measured unemployment rates of between seven and eight percent a rising money wage and real wage trend was not "underbid" by those regarded as unemployed.

These are essential facts in the background of the finding that the employed proportion of those nonworkers who are classified as unemployed, the unemployment rate nevertheless also has shown an upward trend. As long as these institutional developments last it would be highly ill-advised to direct monetary and fiscal policies to targets expressed in terms of measured unemployment rates. Following the mid-sixties it was possible for a while to raise the level of activity and to reduce the measured rate of unemployment by creating an increasingly inflationary environment in which workers and employers believed they would earn higher real incomes than turned out to have been the case. We are still suffering from the consequences of those policies from which the Federal Reserve finally began turning away in 1973, and it remains the big question in American policy-making whether in the future our authorities will resist the temptation to rely once more on inflationary stimuli which must inevitably backfire.

The inevitability of a subsequent backfiring of inflationary stimuli follows from the fact that public learns from experience and that therefore policy makers cannot succeed for long in inducing market behavior based on an underestimate of future inflation and a corresponding overestimate of real incomes. After a while it becomes necessary to put an end to an accelerating process of inflation, and the subsequent readjustment is always painful because many past commitments incorporate the expectation of increasingly inflationary trends. Indeed, after the experience of recent years it is very likely that the period in which inflationary techniques would temporarily raise the level of activity has by now become very short — perhaps of negligible duration. It is very likely also that the public will not acquire the conviction that the period of inflationary instability is over before the authorities adopt a consistent and hard-boiled policy of reducing the inflation rate to insignificance.

VII. Reflections on basic differences in policy attitudes

The difference in approach between the long-run and the short-run orientation should now be illustrated by positions taken in this specific setting.

What in this paper is described as short-run orientation favors one of two types of programs or, perhaps more usually, a combination of the two types. Expansionary monetary and fiscal policies are favored with the objective of raising real activity and of

reducing measured unemployment by accomodating the inflation rate that would develop at the desired rate of "real" expansion. At the same time economists representing this position are favorably inclined to various degrees of administrative money-wage and price regulations that admittedly may be required to prevent an acceleration of inflation under such expansionary programs. Basically, the argument behind this conception is that it is necessary to be "short-run oriented" in this particular sense in order to establish an acceptable long-run. If such programs are not adopted, then the economy may become stranded in an unsatisfactory short-run position — or at any rate the economy would remain in a position regarded as intolerable long enough to make the survival of the present institutional arrangements unlikely (perhaps, according to this view, even undesirable). I believe to have given here a fair account of a position with which I disagree. The reason I consider it a short-run oriented position — rather than an economically short-run minded component of a long-run political position — is that those taking the position have nothing to say about the inevitable long-run consequences of their favored policies on our economic and political institutions. I feel convinced that these changes would be substantial, and in essential ways unpredictable.

What in this paper was described as the long-run oriented position maintains that the programs outlined above would be practically certain to lead to accelerating inflation with merely a limited, short-run gain in real activity — a gain which by now would probably be of very short duration — and that in the longer run these programs would cause very serious damage. As for the administrative regulation of the wage and price structure, under contemporary Western institutions, this would not even achieve its immediate objective for longer than a very limited period. This is particularly true of the United States, whose relatively high degree of independence from outside influences would expose such a system of controls to the day-to-day play of political forces to a very great extent. Thus, the long-run oriented approach as it was presented in this paper rejects the conception of fine-tuning plus controls for the sake of achieving specified goals in terms of the measured unemployment rate and of specified levels of real activity.

For no country or groups of countries is it advisable to engage in detailed predictions of future institutional developments. But it does make sense to pose the question what lines of economic policy are compatible with an institutional setting and thus with political arrangements not essentially different from those which a country already has. It seems appropriate also to suggest that, to be sincere and convincing, the advocacy of a policy line that is incompatible with a country's current institutional structure would require a much broader type of analysis than that which the advocates of economic fine tuning and controls are presenting. Adherents of these programs would have to become articulate on the question of what values would need to be sacrificed in order to make these programs effective and on what route they visualize developing the change of mind in their countries that would result in the implied institutional restructuring. What kind of change in our economic and in our political institutions? How are those changes to come about and how are others to be avoided? Leading a country into an institutional no-man's land is not a promising program.

Those of us who in the terminology of this paper are long-run oriented feel convinced that over a reasonable time horizon fine-tuning plus controls are not a feasible line of policy in anything like the present institutional setting and that a slow reduction of the high measured unemployment rates that have developed in the wake of steep inflation are a price that needs to be accepted for avoiding the severe disturbances which fine-tuning efforts plus controls would create. For quite some time these disturbances would manifest themselves in inflationary instability of the well-known variety; what kind of institutional change would result in the end from these disturbances is, in our appraisal, unforeseeable, and it is unforeseeable not only by ourselves but also by the other side which, in fact, usually by-passes this question.

We therefore stand for a policy creating effective demand which leaves room for no more than a consistently diminishing rate of inflation, period after period, until inflation is reduced to insignificance — say, into the range of “negligible” general price increases we had in the years 1951–1965 before our policy makers started engaging in inflationary overexpansion. Along with allowance for diminishing inflation rates the policies impinging on the creation of effective demand would have to make room for “real” expansion at a rate compatible with the diminution of inflation. In the near future this is very likely to be a more moderate rate of real expansion than that regarded as “necessary” by the short-run oriented. The money-wage and price-setting practices in the markets would then have to adjust to the constraints created by a consistent and credible demand-management policy. Once policy makers become credible on a declared intention to employ as much demand-policy restraint as is necessary to reduce inflation gradually to insignificance, price expectations will be formed accordingly. Money-cost trends will also develop accordingly because these have all along been influenced decisively by price expectations.

No one can engage in firm predictions about the pace at which the measured unemployment rate of the United States would diminish under such a policy and where it would settle down. But attributing much significance to our measured unemployment rate would have to rest on the claim that that rate measures involuntary unemployment in a meaningful way, and as was explained above, such a claim is wholly unsound. The chances that a policy based on these principles — a long-run oriented policy — will be adopted are obviously not the same in all Western countries. It is a major open question whether the policy will be adopted with the required degree of consistency even in the United States where causing the wage and price-setting practices gradually to fall in line would cause much less friction than in some other countries.

The difference between long and short-run orientation in these matters is basic. Despite the inevitable vagueness attaching to the distinction between schools of thought, there is justification for speaking here of such a difference. It is important to remember that those following the long-run oriented approach place more emphasis on the role of monetary policy, and particularly on that of money aggregates, than does the other side, but views regarding the relative significance of monetary and of fiscal policy nevertheless shade over into one another too much to be sharply distinguishable.

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НАУЧНЫЕ ШКОЛЫ В ОСНОВНОМ ПОТОКЕ АМЕРИКАНСКОЙ ЭКОНОМИЧЕСКОЙ НАУКИ

У. ФЕЛЛНЕР

В истории экономических учений принято различать различные школы. Для разграничения ныне влиятельных западных течений — неокейнсианства и монетарной школы — весьма пригоден временной горизонт времени: неокейнсианцы ориентируются на краткосрочные периоды времени и ожидают достижения желаемых темпов экономического развития, устойчивых в течение более продолжительного отрезка времени, от использования средств, применяемых на протяжении следующих друг за другом краткосрочных периодов, от влияния бюджетной политики на регулирование спроса. Сторонники же монетарной школы отвергают прямое регулирование, меняющееся в течение коротких периодов времени и базирующееся на сомнительных прогнозах. Они считают, что необходима стабильная и перспективная политика, предоставляющая достаточное поле деятельности рыночным силам. Таким образом поведение действующих лиц рынка в течение коротких промежутков времени позволит без каких-либо помех формировать долгосрочные результаты, ожидаемые сторонниками монетарной концепции и поэтому последние ориентируются на долгосрочные периоды времени. Монетаристы подчеркивают значение спроса и предложения денег, а внимание неокейнсианцев направлено, в первую очередь, не средства бюджетной политики, регулирующей совокупный спрос в течение краткосрочного периода, изменения же в предложении денег они считают существенными лишь постольку, поскольку они вызывают также и изменение ставок про-

цента. Политика, ориентирующаяся на краткосрочные периоды времени, потерпела фиаско, и дальнейшая судьба рыночной экономики Запада зависит от способности политических деятелей проводить стабильную политику, рассчитанную на долгосрочный период в соответствии с монетарной концепцией.

В дальнейшем автор иллюстрирует различия между этими двумя концепциями на примере безработицы в США. По сравнению с шестидесятыми годами безработица увеличилась почти в два раза, но, несмотря на это, возросла доля занятого населения, так как возрос процент женщин и молодежи в возрасте до 20 лет, желающих поступить на работу. Статистика весьма неточно различает действительных безработных и тех, кто и не ищет работы. Было бы ошибочным решением объявить политической целью достижение уровня безработицы, характерного для шестидесятых годов, и применять инфляционные методы в интересах повышения занятости, так как не учитывались бы существенные изменения, происшедшие на рынке рабочей силы. Политика, направленная на достижение определенного уровня производства и занятости, применяющая средства бюджетного регулирования и контроля за ценами и заработной платой на протяжении продолжительного периода времени, грозит тем, что инфляционная нестабильность станет постоянной и произойдут непредвиденные институциональные изменения.

M. AUGUSTINOVICS

QUANTITATIVE SYNTHESIS IN LONG-TERM PLANNING

In the Hungarian practice of long-term national economic planning, involving 15-20 years, new methods are used in quantitative synthesis. The article reviews the considerations of planning theory underlying the introduction of new methods and the mathematical planning models worked out for producing plan variants, together with the analytical models used in the initial macroeconomic prognosis as well as for a deeper investigation of plan variants. The computerized planning system worked out for practical reasons, the experiences of its application and the tasks of further development are also reviewed.

The Hungarian long-term planning practice may look back upon *two planning efforts*. The first exercise covered the fifteen years between 1971-1985 and lasted from 1968 to 1972. The first draft of ideas about development between 1976-1990 were then worked out by the end of 1975. At present the latter are being completed and improved in view of more recent knowledge. According to preliminary views the *third effort* - to cover perhaps not fifteen but twenty years, up to the turn of the millennium - will start in 1978-1979.

Long-term planning had to face many new problems. Even if it could not solve them all, it added new elements of social, economic, policy-making, methodical and organizational character to the ideas and enriched the scope of ideas and tool-kits of economy-wide planning. From among the many important planning tasks of and experiences gained in setting socio-economic goals, technological and scientific blueprints, forecasts, partial concepts and partial variants, and fitting in qualitative and quantitative elements, here a *single* group of questions will be briefly reviewed: the *mathematical models* used in the economy-wide synthesis and the *computer-based planning system* developed during the exercise.

Considerations of planning theory

Many models are known and even more may be devised. Models may be used for many practical planning purposes: e.g. for intersectoral planning, or for computing macroeconomic forecasts, without sectoral detail. Accordingly, many kinds of mathematical forms and techniques are applicable. Data, too, for implementing the models may be acquired and estimated from many sources. This diversity is not only possible, but even desirable since it contributes to our knowledge of various aspects of the economic

process, and may raise the standard of planning work in many fields. No doubt, this diversity will characterize the application of models in future planning.

When long-term planning was started, we had to reckon, however, with the limitations in our abilities and possibilities. We had to determine the first and most important field of application and mark out the direction of development in "planning technology".

We set out from the fact that under socialist relations of production the *social control of the global economic process*, subordination to social interests, becomes possible and necessary for the first time in history. Therefore, as opposed to partial planning to be found also in other societies, *economy-wide planning has the particular task* to set up alternative strategies and tactics of controlling the global process; to prepare the relevant policy decisions.

It follows that the particular and central methodological problem of economy-wide planning becomes the *synthesis*, the fitting of parts into a whole in such a way that the whole should actively bear on the parts. This is not merely a summing up of parts and much less an addition or aggregation of the planned indexes. On the contrary: it means the marking out of socially *desirable* development directions which are fitted into the framework of an economy-wide system of interrelations.

The role and function of synthesis is a double one within the whole process of economy-wide planning. On the one hand it formulates the *macro-economic concept* of a growth rate in harmony with social requirements and with the main national economic proportions. On the other hand, precisely by relying on the latter, it must react on partial decisions of major importance, it must have a feedback effect on the most important *actual development projects*. This can be realized only if the macroeconomic concept is born not as a "particular partial concept", by itself, but is born out of the development alternatives of the important individual fields, relying on them in organic unity and mutual interaction. However great the difficulties of and limitations to practical implementation, economy-wide planning – as opposed to partial planning – evidently has to face this requirement and its maturity may be measured by the extent to which this requirement is satisfied.

One of the tasks of *synthesis* is to secure *consistency*. Depending on the given task of planning and the particular stage of work, the notion of consistency may be interpreted strictly, or loosely, in detail or in the aggregate, but in some definite sense we always aim at consistency. But this is not sufficient. Not one, but many consistent variants need to be elaborated *in order to define the domain of free decision and action*, to mark out the objectively possible directions of development, *to evaluate their advantages and disadvantages*, to prepare well founded economic policy decisions. Thus, in the synthesis the essential development alternatives of the most important parts must be known, together with the alternative forecasts of objective, external conditions and the future picture of the global process must be worked out *in variants*.

With growth and development the system of economic interrelations becomes increasingly complex and is less and less surveyable by simple tools. Therefore, a

quantitative synthesis, drawing up consistent variants and actively bearing on the development of the parts, can be less and less realized today by traditional desk-top computations. This may become a bottleneck of the whole process of economy-wide planning.

In the synthesis we need such technical tools which allow us to trace the secondary and even farther effects of complex interrelations, to deduce from changes in one or several factors ensuring changes in the whole system, to evaluate the partial alternatives in view of the global process; and all this with many variants, in a hurry, and repeatably as many times as needed. This is what lends utmost importance to the application of *mathematical planning models* in improving the "technology of planning".

These theoretical considerations led us in identifying the main fields for the application of mathematical models in long-term planning. We were of the opinion that *the mathematical models and computer technology must be used first of all for quantitative synthesis.*

This objective was supported also by another, more practical consideration. If we start to build partial models in several independent sectors, there is always a danger that these will not fit together, they will not mutually complement and check each other — either methodologically, or as to their economic interpretation. If, however, we create first *a hard core, an economic, logical and computational "skeleton" for quantifying the most important economy-wide interrelations*, later it may gradually ramify and the models of some partial problem or partial sector will be then able to rely on a firm macroeconomic background, while enriching and complementing it. (In the second cycle of long-term planning the development of a few such "ramifications" could be already put on the agenda.)

Behind both the theoretical and the practical considerations we find, in the last resort, the experience gained from the practice of short and medium-term planning in the course of several decades. *The specific features of long-term planning* however, could be outlined only logically at the outset, and even the experience available from the two planning rounds does not yet provide a safe basis for generalization.

Long-term planning covers *the whole national economy*, it is not merely partial planning. Thus, regarding its substance, the basic task of quantitative synthesis is the same as when planning for shorter terms. At the same time, the aim and character of long-term planning and its role in economic control is different from the ones encountered in short-term plans. Therefore, the ways, actual requirements and organization of the whole planning work and, within it, of the quantitative synthesis differ considerably. In what, to what extent and how they should differ — this has been much discussed and will certainly be debated for some time, since this can be decided only in possession of much richer evidence than available at present.

The most important differences are certainly *the economic issues derived* from different planning horizons. In long-term planning first of all those economic processes must be *dealt with which develop only in the long run and can be thus drawn under social control only in the long run*. Such are: the mutual interrelation of economic development with the *social* processes and with the *natural environment*, the irreversible process of

accumulating material goods and intellectual (human) capacities. But these secular tendencies do not live a separate life, they appear in the everyday environment of economic activity, they are expressed in the structural shifts of production, consumption and foreign trade, they depend on the equilibrium and growth rate of the latter, on their efficiency taken in a wider sense. It follows that the *system of economic notions and indicators* used in long-term planning *cannot* basically differ from that applied in shorter-term plans.

The time available for long-term planning purposes — more exactly the desired continuity of the exercise — makes it possible and even necessary that *the planning process* should be built up and organized in a specific manner. From this fact there emerged some unusual and novel features of planning whose implementation was not and could not be free from problems and difficulties.

In working out the tools of planning technology these particular features of long-term planning were considered *as given*. Of course, models can be constructed also for other approaches, for other methodologies and other informations and the computer will process any kind of data. Long-term planning differs from short-term planning not because of the use of the latter, it was on account of the particular features of long-term planning that an integrated application of models and computer techniques took place under particular conditions [3].

In the application of models and computer techniques in long-term planning we could rely on important antecedents [6]. Also their positive and negative lessons and partly their results could be utilized:

- planned “chess-tables”, that is, planned input-output tables have been used in annual planning since 1958 and in medium-term planning since 1960;

- for the purposes of medium-term planning, relatively *large linear programming models* were built and implemented in conjunction with the practical planning work. These varied in detail, conception and organization in the planning of the third, fourth and fifth five-year plans;

- in the course of preparing the third five-year plan an unsuccessful, yet instructive attempt was made at the *mechanization of traditional* (non-mathematical) plan *computations* with the aid of Hollerith techniques;

- *the system of national accounts* was expanded and became established in the annual and five-year plans and this could be taken over as a framework for the conceptual and methodological summary of macroeconomic aggregates.

But the antecedents and earlier experience could not provide orientation in two important respects, neither was there available international experience. There were no methods elaborated for the construction of *mathematical planning models* that would correspond to the requirements of a *15–20 year horizon*. Nor did a computerized planning system exist comprising both mathematical models and the so-called traditional planning computations. Their elaboration and practical implementation is a new feature of our long-term planning practice.

The Economic Committee for Long-term Planning formed a sub-committee of economists and mathematicians in 1968 to work out proposals for the application of mathematical models in long-term planning. Practical work started along the lines set by the sub-committee, towards setting up a *family of models* for long-term planning. Essentially and in principle we are still working on these terms, although some important proposals – in the first place the construction of sectoral models in fields important for long-term planning – have failed to materialize to this very day. On the other hand, practice called for the solution of many tasks which could not be foreseen by the sub-committee.

Since then the international economic literature on long-term and economy-wide planning systems became lively and rich with many valuable works. In western countries long-term, partly world-wide forecasting models and their numerical results have been published. In the socialist countries, mainly in Soviet and GDR literature, the attention of research turned towards model systems of economy-wide planning based on cybernetics. We have not yet performed a detailed and methodological comparison of the models and computerized planning system used in our efforts with the most important proposals contained in those works. We know that beside many deviations and differences in approach we may find also many similarities since the problems of further development of economy-wide planning methods arise in the socialist countries, if not identically, yet under similar historical circumstances. On the other hand, the macroeconomic problems of the long-term perspective of economic development also emerge, if not in an identical, yet in a similar manner all over the world. Beside the similarities it is by all certainty a particular feature that the computerized planning system as applied in Hungarian planning practice, and comprising also mathematical models, has come about and is operating *in the framework of a real, living planning process*.

The mathematical planning models

In the closer sense of the word, we call “planning models” those mathematical-economic models that are used for producing economy-wide plan variants. These may be classified as “decision models” known from literature – although, of course, the model does not decide; the model is a tool of reasoning, for recognizing and studying interrelations, for preparing decisions. (Other types of models, used for other purposes in the framework of quantitative synthesis, will be discussed in the following section.)

There is ample international and Hungarian literature on the subject and the domestic experience of application in five-year planning has developed well tested methods for the formulation of the problem of economy-wide synthesis in the form of mathematical programming problems [13, 12].

The most general common features of the formulation may be summed up as follows: the level of activities of individual parts of the economy in a given period (the volumes of output, consumption, export and import) are represented by the *variables* of the model. The input pattern of the activities is characterized by *coefficients* pertaining

to the variables. Consistency of the global process is described by equalities or inequalities, or *constraints*; the result is represented in the *objective function* (the function to be maximized or minimized, depending on the value of the variables).

These models describe a system with many feasible solutions; it is rendered unique, subject to the given constraints, by the actual choice of the objective function. This corresponds to the economic assumption that society has diversified and realistic choices in shaping its economy; at the same time, it allows to use the models for studying and analysing the system of economic interrelations.

But it was a new task even in principle, supported by few antecedents in literature, to apply such models, reformulate them and improve them in conformity with the requirements of the *long planning horizon*. It was obvious at the very outset that we would be unable to solve the problem at one stroke, that several kinds of approaches, experiments and experience were needed. This is why several planning models were constructed for the purpose of quantitative synthesis.

In respect of a few basic features these models are highly similar to each other. Each of our models comprises *several periods*, that is, it interprets the variables representing the partial activities and the constraints prescribing the consistency of the global process not for a single period but for several consecutive periods. The planning period of fifteen years was broken down usually into three five-year periods, in one of our models, however, into fifteen one-year periods. The input coefficients usually *change* from period to period. Each model comprises *intertemporal relations*, connecting the periods. From among them the *relation between investment and production is explicit*. (The actual form of this relationship is different in the various models, this is precisely that distinguishes them from each other.) Investments are handled in each model as *endogenous* variables: the investment level of the particular periods depends on the entire system of relationships and – except for some analyses with special purpose – is not limited. Similarly, in every model there are *smoothing constraints* expressing implicit *intertemporal* relationships. Thus certain activities are constrained to grow slower or faster than certain limits.

Each of the models is “prepared” to handle alternative objective functions, but whenever not the objective itself, but the role of other factors is examined, it is *usually personal consumption* (inclusive of services) that is *maximized*. As a matter of fact, in the long-run, growth of production, investment or foreign trade can hardly be considered as an end in itself, and the various aspects of economic equilibrium are obligatorily prescribed by the constraints.

These features developed and became tested in the modelling practice, *as the basic “devices” of long-term modelling*. With their aid we are able to depict not only the distant end period, but also the path leading to it. It may be attributed to this fact that our models “hold their own” even in their present form. With proper interpretation and analysis each of them is a usable long-term planning model; it allows – and has indeed allowed in practice – to produce long-term macro-variants within the scope determined by its abstractions, to analyse in quantitative terms some factors influencing the development of the economy and to draw some qualitative economic conclusions.

Nevertheless, we are not fully satisfied with these models. We believe that precisely the particular contentual orientation of long-term planning is not sufficiently reflected, above all the presentation of the *social aspects* of development is weak. Consumption and labour appear in overly aggregated forms; the mutual relationship among consumption, income and labour supply is not followed up. We do not know about the effect education, culture and health service may exert on productivity. In short: the relationship between production and society is loose and lopsided, as if society were only a beneficiary of production and not simultaneously its active agent. All that is, of course, not the exclusive property of these models. Their status reflects the *lacunae* in economic knowledge, the limitations of the system of economic notions and indicators. Within the models, however, these deficiencies become more pronounced, since they lack verbal argument. Thus, a contentual development of the models demands first of all the solution of planning problems of economic nature.

As regards its mathematical form, every decision model of ours is a *linear programming model*, partly with mixed variables. This is the only available method, which can be used in practice for the handling of large-scale systems with the aid of computer techniques. There are many prejudices current in connection with the application of linear programming for long-term planning purposes. However, according to practical experience *mathematical programming* is the best technology available for exploring a *domain of decision and action* which, though limited by objective endowments, still comprises a wide scale of opportunities; and the *linear form* does not exclude investigation of those *non-linear economic interrelations* which we are able to formulate and quantify in economic terms. Up to now we have always succeeded to "squeeze" the known and quantifiable non-linear interrelations into the linear framework; the difficulty is much more of economic, planning and statistical nature than technical.

Here it is most important that in economic reality neither production nor consumption functions are linear. In other words, the coefficients of input per unit of output or those describing the pattern of consumption are not "constants" but depend on the level of production or consumption. In production they depend on the assortment and on market orientation, in consumption on the distribution of income and many other factors as well. But we do not know the explicit form of this dependence, and planning practice is even less able to quantify the future shape of dependence. Thus, the use of non-linear production and consumption functions is out of question not only for computational but for planning reasons as well. This may cause trouble also when modelling shorter periods, but here the level of production and consumption moves within relatively narrow limits. By the end of a longer planning horizon, however, depending on slower or faster growth, the movement may become large. Thus, the *non-constancy* of coefficients appears in long-term planning closely interrelated with the *dynamics* of growth. It is mainly in the handling of this problem that our decision models differ from each other.

The methodology of long-term planning prescribed that for each sector of *production* and for the long-term development of *living standards* a few conceptual *variants* should be worked out, which differ in respect of *dynamics and the pattern of inputs*

(consumption), and which should cover, in their entirety, the whole practically feasible domain of growth.

If the variables of a linear programming model represent such variants then, in the course of choosing from among the variants, or by combining them with different weights, the model itself will produce changing coefficients according to the different variants. Thus, in spite of the linear form, the model does not work with constant coefficients, but yields coefficients depending on the level of production (consumption), on the dynamics of growth, or on some other conceptual factor included in forming the given variant. Though it does not "know" the general form of dependence in the domain outside the variants, we may rest satisfied that it "knows" the change in discrete points of the domain covered, and represented by a given variant.

Two models were constructed prominently for working with variants. One is called HOVA (from the initials of the Hungarian name: selection for long run) and the second DINAMIKUS (dynamic) [5, 8, 9]. According to the original ideas, in both of them 0-1 variables would have represented the implementation or non-implementation of an alternative, covering the whole fifteen-year period. Thus, the models would have only selected from a many-sidedly elaborated stock of variants. They would have indicated which development alternative *it is desirable* to implement in some partial field, with *what* given national objectives and constraints. This assumes a certain *division of labour* in the synthesis. The "centre" knows the constraining system of interrelations representing the internal and external endowments and determines – in alternative forms – the socio-economic objectives to be pursued, but it wisely knows that it has not sufficient expertise and information to "find out" what everything and in how many ways can be done in the particular fields. The "planner of the partial field" works out, in possession of rich, specialized social, economic and technological knowledge all the possible alternatives, but wisely knows that he has insufficient overview to determine what is best or at least better from the viewpoint of the whole economy. The two models selecting from among partial variants were destined to serve as tools in the dialogue between the two.

Within the identical approach to planning the two models differed mainly in how they handled the intertemporal relationship between production and investment. In the HOVA model, the *extent* to which a selected variant was implemented *varied freely* within an interval, originally thought to be narrow, the extent of implementation was represented by a continuous variable. Within the interval production and investment moved together, in the same proportion, away from the original; depending on the extent of this shift the capital/output coefficient changed, but the output/investment coefficient remained the same, – together with the other input coefficients of the variant selected. In the dynamic model the *development*, that is, investment, target of the variant selected for implementation was realized *exactly* to the extent and at the rate originally planned: yet production could be less or – to a limited extent – more than originally envisaged, similarly with the original current input coefficients.

The exploration and quantification of real development alternatives in the partial fields met many unforeseen obstacles. The assumed wise knowledge of limitations was,

seemingly, far from perfect on both sides. The number of partial variants worked out was small even at the outset; and only in a few cases did the variants reflect real, conceptual alternatives, they differed rather only in level and rates, hardly even in respect of input structures. (A fine example for the difficulties in quantifying non-linear production functions.) Moreover, during the central preselection of the partial variants the majority of these had to be dropped. Finally, what was available for the quantitative synthesis was *a single variant for each sector*; a single accepted quantified picture of the dynamic trend and the future changes in input structure judged as suitable for future use. It was continued to be called "variant" only because we got used to the term. (The discarded variants, which had not been corrected even from technical aspects, were later used in experimental computations.) This happened not only once; in spite of thorough preparation, changed organizational form and division of labour, relying on experience of the first efforts, it so happened also the second time. All that gives much food for thought, although the lessons for the preparation of the third round of long-term planning are not yet wholly mature.

At any rate, we had to change partly the structure of the models, partly the interpretation of the role of model computations.

In the course of practical plan computations we "put out of order" the 0-1 variables of the HOVA model.* In the first step the interval of variation of the continuous variables assigned to the "variants" of the particular branches had to be much widened in order to get a feasible solution at all. But linear shift of the variant at the same rate throughout the whole fifteen-year period resulted in growth dynamics difficult to interpret. It was particularly for the first five-year period that unsound, too high or too low growth rates appeared relative to the base period.

Thus, instead of evaluating alternatives in respect of dynamics, first of all *the dynamic limitations of the set of "monovariants" had to be lifted*. On the basis of various considerations of principle and practice we decided not on formal transformation of the model but on producing "artificial variants".

In the second step *a lower and an upper constraint variant was constructed for each "variant"*. These form a band similar to a "cone" setting out from one point, the base, whose form retains *the original dynamic trend*, e.g. accelerating or decelerating throughout the plan period, but within it the freedom of movement is smaller in the first five-year period and gradually increases later; within it the concrete dynamics of growth can be determined by the model. The solution is constrained to remain within the "cone", the solution has to be a convex linear combination of the lower and upper constraint variants. There belong different input coefficients to the lower and upper constraints thus within the "cone" the coefficients are not constant but depend on the

*In the Computer Centre of the National Planning Office several solutions were produced to the original model with mixed variables, using the uncorrected original variants mentioned. It turned out that when the parameters are fortunately chosen, the complete model can be well handled, though it is much more time-consuming than the smaller continuous version.

growth rate. (It is a different problem whether the "centre" has satisfactory and expert information to assign the proper coefficients to lower or higher levels of output. In practice this possibility was used only in that the investment needed per unit of output was moved. The other input coefficients were taken over for both the lower and the upper constraint variants from the original "variant".)

In this form the HOVA model reasonably adapted itself to the situation with only one variant in each sector. However, this situation proved to be unacceptable for the synthesis from the meritorial viewpoints of planning. The dynamic trend and changes in efficiency determined by the set of monovariants, contradicting each other at essential points, determined an extremely *narrow domain* for the implementation of the long-term social and economic objectives. It became necessary to deviate in merit, i.e. in content, from the given set of monovariants, at least to investigate the possibilities, limits and results of such deviations.

In the third step we produced in several sectors again new, special "artificial activities" for the HOVA model. These were no longer interpreted for the whole of the fifteen-year period, but only for five years, they were variables modifying production, whose signs were not predetermined, thus they allowed also *deviations from the trend determined by the "cone"* i.e. acceleration instead of deceleration and conversely. In addition, to these variables we assigned coefficients different from the original ones; in this case we left to the model to move, to "shape" capital/output ratios of the sectors, depending on various conditions. It thus became possible to work out variants in respect of efficiency.

It is in this extended form that the HOVA model served the national-level computations in the second round of long-term planning. Beside many individual solutions we operated with parametric series, applying parametric programming mainly to the objective function but in a few cases to the constraints, too. In addition, experiments were started in the Computer Centre with separable programming which has recently become realizable. Though with experimental character, there is a variant of the HOVA model, called SZEPI, operating, in which it is attempted to use separable programming for the non-linear regulation of the pattern of foreign trade.

During the complementation in course of the second round of the long-term planning exercise new, revised and modified partial variants will be drawn up by the autumn of this year. Obviously, in conformity with the requirements of the new phase we shall again modify the model. We are slowly getting used to the idea that the name HOVA is not that of a concrete model (we already have several variants of it), but a symbolic collective denomination for a mathematical programming model shaped according to the actual planning tasks and possibilities, which is at the centre of practical plan computations.

The "selecting" character of the "Dynamic" model has not been abandoned, its 0-1 variables have not been eliminated. This model has been *preserved for studying the techniques and possible results of selection among variants*. But the prescriptions regarding dynamics have been loosened, the model is allowed to rephrase the investment

program of the development variant selected. Several computation series were performed also with this model. These must be considered as experimental, since the model worked with sectoral variants that were not accepted for synthesis, and were not even technically corrected. Nevertheless, the results proved to be economically interpretable and instructive.

The other two decisions models were constructed from the outset for studying problems which are farther from the partial variants and which cannot serve as topics for direct practical dialogue between the "centre" and the partial planners. For various reasons the model called "TÖBBTECHNOLÓGIÁS" (i.e. using several technologies) operated only in the first round of planning, while, on the contrary, the "KÉSLELTETŐ" model (lagged model) came to life in the second round and is still an adolescent, although it has already enriched the second round with some essential statements.

The "TÖBBTECHNOLÓGIÁS" model came about as an extension to three five-year periods of the model constructed originally for the purpose of working out the ideas of the fourth five-year plan [17]. It set out not from the development alternatives worked out in sectoral planning, but from *three* predefined "technologies", set up uniformly for each of the sectors, — meaning production with existing, reconstructed and new capacities — and combined from them the development strategy of the given sector. There belonged constant input coefficients to the individual technologies. The change of the input structure over time emerged from the model depending on the varying weights of the three technologies.

The KÉSLELTETŐ model differs from the rest in the division of time, in the intertemporal relations, in handling *the dynamics of growth* [4]. It established the level of activities not only each five years but *for each individual year*, of course, with annual constraints and annually changing input coefficients. Within that it accounts — using statistical data — for the gestation times of investments, different in each sector, that is, for the time lag. Consequently, it assumes mutual interrelations between the output levels of 5–6 consecutive years. This model thus serves the study of *the alternative time paths, of the internal relationships of the investment process*. Handling 15–20 periods instead of three or four, of course, strongly increases the size of the model. Therefore, it takes into account but a single alternative in each sector: this is determined by external preliminary choice. In order that the dynamic work of the model should not be disturbed by essential structural inconsistency, it is expedient to build up its data basis from a consistent structure. Accordingly, in the second round of planning this model was used in such a way that dynamic variants of a solution of the HOVA model were produced with its aid. It can be foreseen that in the next phase of long-term planning the questions of the investment process will come to the fore; investigations of this type will, therefore, obtain a greater role.

Looking back, it may be stated that in performing practical plan computations, in shaping the ideas of the synthesis, our models have not obtained equal roles. Practically, it proved impossible to quantify simultaneously three or four models and operate them parallelly, with the same intensity, to give to the arising daily new problems four answers

derived from four different models. A certain *division of labour* developed among the models. The HOVA model was at the centre of the practical, continuous and operative planning computations. The other models partly provided *methodological* lessons with their particular structure, and partly allowed a *further*, deeper, *analysis* of a domain or a point already explored with the HOVA computations. This division of labour had not been planned in advance, it developed in practice, but it offered such experience which will be reckoned with in the future.

At the same time, the various approaches were absolutely necessary and useful. The handling of intertemporal, long-term relations between production, capital and investments, the presentation of the dynamics of growth and of the ensuing input structure are satisfactory in none of the present forms of the existing models. It seems, however, that relying on the experience gained, we shall be able to devise a uniform formulation uniting the advantages and more or less eliminating the disadvantages. If we succeed, we should like to aim at new problems with several models, to gain new experiences: a deeper modelling of the social aspects of economic development, the working out of partial models for some outstandingly important economic processes, and their linkages with the central model.

The analytical models

At the beginning of each round in long-term planning quantitative macroeconomic information, orientation, must be given to those working on the partial variants. This is the starting *macro-economic analysis* which, relying on the investigation of past development and various forecasts, provides likely outlines for the most general development tendencies of the economy as a whole, its future rate of growth, and its main economic proportions. These are only "likely" figures, since at this stage, in lack of alternatives worked out for the partial fields, central computations and reasoning do not yet comprise strategic elements for decision.

When the first phase started, a tool for analysing past development was sought in *trend computations*. We believed that by projecting the basic past tendencies into the future we would succeed in creating such sharply distorted pictures of long-term development paths, which would alert us to the necessary changes. We fitted trends, relying on various hypotheses, to time series of those macroeconomic indicators from which a *balance of national income* might be produced.

Initially we used a great many types of functions for fitting; we set out from the requirement of mathematical statistics to obtain *the best fit* of the approximating function to the data series. It soon became clear that the extrapolated values obtained with the aid of such curves either lead to economic absurdity (e.g. a negative value of output) or represent the projection of a characteristic that has no economic interpretation. As a result of this experience, we continued to use *three types of functions* expressing three properties of the development over time of the indicators investigated:

linear and exponential trends and — where this did not lead to economic absurdity — parabolic trends of second degree.

The results of extrapolation derived from the trend computations reflected indeed the assumed distorted picture. The structure and equilibrium position of the balance of national income, as well as the confrontation of extrapolated employment with the labour forecast already known, clearly showed that continuation of past tendencies in the same direction and with the same parameters would be impossible in the future. In a sense this may be called a negative forecast [2].

In the second round we had already better opportunities: the results of the first round (ending in 1985), and its quantitative synthesis were available.

For the purposes of the preparatory macroeconomic computations a small model, though covering a long perspective — past and future alike — was worked out. It was called MAKRO model. It investigates the *dependence of the long-term growth of consumption on the level of employment and on its structure by main branches of the economy as well as on efficiency in these branches*. Efficiency is represented in the model by productivity, capital equipment, the ratio of circulating to fixed assets, the rate of scrapping and the gestation period of investments, as well as by export and import elasticities. These factors determine, in combination, the gross national product, accumulation and external utilization — and consumption is obtained as a residual.

The model comprises *one equation for each year*, which implicitly describes the balance of GDP; the equation is solved to yield consumption. Because of lagged investment annual accumulation depends *intertemporally* on the production of the preceding and some subsequent years, thus the equations cannot be solved by yearly procession. Yet the whole system can be solved with the aid of *sequential computation*, proceeding by factors. First the time series of production is worked out for the whole period covered, from this partly foreign trade and partly the stock of assets and then of accumulation is arrived at — finally, as a resultant of the whole system, we obtain the *long-term time series of consumption*.

The model was solved for the forty-year period of 1950–1990. “Modelling the past” served the purpose to present the past economic processes *within the same system of relationships* in which the future is analysed. Relying on the past and comparisons with the past allow us to see clearly the *changes in tendencies* characterizing the future, and to be able to judge the relatively short plan period of fifteen years *embedded into the history of the economy* [7].

In the two rounds of long-term planning hitherto completed the starting macroeconomic orientation was followed by drawing up partial variants and, on their basis, by a series of central computations performed with planning models. The direct results of these computations, the individual solutions of the planning models “speak for themselves” to those knowing the structure and operation of the model — but very succinctly. Some distinguished points of the domain of development explored with the aid of model computations — e.g. the extreme cases to be qualified as border cases or the solutions within, to be deemed “realistic” — require deeper analysis. This analysis, as against the

starting macroeconomic analysis, is called upon to explore the future effect of alternative decision strategies, to examine the future economic structure emerging as a result of particular strategies.

The coefficients of our planning models and the values of the variables in the solutions describe for each period a complete system of national economic interrelations – complete, of course, at the level of abstraction applied. Various forms of the input-output model proved to be useful tools for investigating these assumed future economic structures.

The long-term planning computations are essentially volume computations: both the partial variants and the macrovariants produced with the aid of the planning models are described in constant domestic prices. (The forecasts for world market prices are, naturally, taken into account.) It is necessary, however, to analyse also the changes in *value proportions* (relative values) during the period planned for and also to establish a long-term *price policy*. It was for this purpose that a *price-model* was constructed, whose theoretical form was known from literature [10], but whose practical application still raised many new problems.

As distinct from the usual price-type computations not an open, but a *closed input-output model* was used. Wages are linked to consumption, the engagement of assets to accumulation, imports to exports, thus every input of production, taken in a socially wide sense, is circularly introduced into prices. *This complete circularity* is a *formal* property of the model, mathematically expressed in an *eigenvalue–eigenvector* problem.

The closed form does not, however, automatically determine the *price type* to be computed. This depends on the actual form in which the system of equations is written and on the actual contents of the variables and coefficients. For an analysis of the long-term changes in value relations first of all two-channel, input-proportionate price systems were used, defined in such a way that the net income proportionate to wages was equated with the part of the consumption fund exceeding wages, and the net income proportionate to assets was equated with the accumulation fund. We also computed so-called *development or self-financing prices*, where the net income financing accumulation is not proportionate to the assets engaged, but is truly equal to the actual cost of accumulation by sectors. The model was used also to compute *three-channel, two-level price systems*; in these the major part of consumption above wages is financed by turnover taxes built in between producer and consumer prices.

Each solution of the price model produces a price system* conforming to the given price type according to the given volume-variant and relating to the given plan period. With this price system the original volume-variant is then repriced and thus such a long-term macro-variant is arrived at that differs from the former not in volume but in prices.

*Of course, by “price”, as in similar price computations, a “price index” should be meant, since the model comprises not single products but 31 sectors corresponding to the sectoral breakdown used in long-term planning.

By analysing the price variants up to now we have tried to investigate three major groups of problems. How do the value proportions determined by the input structure change, how does the value structure change in the period covered by long-term planning? If our existing price system remained in force, how would the antinomies between relative prices and relative inputs change, would they soften or sharpen, e.g. what would happen to the agricultural price scissors, so characteristic of the present price system? Finally, if measurement is made, instead of at actual prices, e.g. at input-proportionate prices, (of either the base period or of the plan period), is a different picture arrived at about the growth rate and the structure of the economy, e.g. about the ratio of consumption to accumulation?

The system of equations of the model, if written for the theoretically interpretable two-channel input-proportionate price type, constitutes simultaneously a *closed equilibrium model*. Its right-hand eigenvalue yields the relative proportions of production of the growth maintaining unchanged proportions – the so-called equilibrium or Neumann path. A growth with constant proportions is, of course, not a “plan variant” – this is why the model cannot be considered as a planning model in the closer sense. But an analysis of the “equilibrium paths” interpreted for each of the consecutive plan periods provides many interesting lessons, it allows insight into the deeper interrelations of changes in the economic structure. Nor is it irrelevant to ask whether in the long-term plan period the economy approaches its own equilibrium path or is getting farther from it. This “primal” aspect of the growth model was analysed only in the first round; in the second it had to be, unfortunately, suspended, in order to free intellectual capacities for more urgent practical work.

It was similarly in the first round that we started to *dynamize* the closed equilibrium model, on the basis of a *systems-theoretical approach* which seemed particularly attractive from the perspective point of view [14, 15]. Here, however, after initial results we ran into more serious mathematical difficulties. Research into these problems is going on at the Computer Centre of the PO.

The *open, static input-output model* obtained a role, too, in analysing the long-term changes in economic structure. Computation of the “total content” indicators (with the aid of the inverse matrix) by macro-variants and periods refines the picture about the direct indicators of efficiency, e.g. productivity, or capital intensity. Determination of the *total labour and total capital contents of exports and imports* and their changes yields a comprehensive and general picture about the changes in the *pattern of trade*. (It is from such computations, among other things, that we understood the “behaviour” of the HOVA model, its unexpected and unusual foreign trade “strivings”.) Similarly, a more aggregated (7-sector), specially structured, variant of the model was used for analysing the mutual relationships between the *competitive and non-competitive sectors* of the economy.

Input-output techniques were also used for an *international comparison* of a few problems [16]. Our forces were not sufficient for a methodical comparison, particularly not for the data collection involved. Yet we wanted to avail ourselves of the opportunity given by the statistically comparable *input-output tables* of 8 European countries and the

USA. We examined some structural changes in Hungary, emerging from the computation series with the models, against the background of structural characteristics in other, mostly more advanced, countries.

In principle we worked only with such indicators (having such dimension) which did not require conversion with the aid of foreign exchange rates. Yet it was disturbing that, because of differences in the national price systems we never knew whether the similarity or difference was real or only an interplay of prices. Therefore, using a highly simplified variant of our price model, we computed the *own* two-channel input-proportionate prices of the countries in question and *performed the comparison also at input-proportionate prices*. We also investigated, among other things, whether the present properties and those in the plan period of our own price system are individual or precisely typical.

In the future we should like to enrich our methods of analysis and expand both the scope of models and that of the questions examined. It seems, however, that the central role of the input-output analysis will persist. The reason is not only that the models are simple and easy to handle, but mainly that practical economy-wide planning has to do with a multiplicity of sectors, and their present and alternative future paths need to be investigated not in themselves but precisely *in their mutual interrelations*.

The computerized planning system

Initially we had not thought of any kind of "systems organization". We wanted to construct and apply models in order to be able to solve the tasks of quantitative synthesis in long-term planning in a demanding and diversified manner. It was soon experienced however that — partly related to the models and partly independently of them — also a great many such computations had to be performed which are simple as regards both form and contents, do not require mathematical formulation but, merely on account of their volume, their time and labour-consuming nature and their repeated occurrence call for computerization. It soon became also clear that it is not efficient if the particular computations are mechanized separately, independently of each other, because in that case the necessary interrelations can be again established only with a massive amount of human labour, manual computations. Thus, it was "under way", on the basis of experience gained in practical work that we arrived at the conclusion that the data processing needed for quantitative synthesis — meaning not only the solution of the mathematical models, but also everything else *has to be organized in a uniform, interrelated computerized system*. The most important elements of the system operated already in the first round of long-term planning; in the second round the system was considerably expanded and became more sophisticated.* We do not consider its structure finished; we believe

*In the first round, as a forced by-product of the work, more precisely as its technical condition, the bases of a planning-oriented computer program system were established. This system, much improved since in the Computer Centre of the PO, is still the most frequently applied data processing tool of planning [11].

that its development, in conformity with the planning requirements, will be a continuous task.

What should be meant by a computerized planning system? Even the simplest mechanization of a single operation requires that the purpose of the task be clarified, and delimited from others; the input data, the economic assumptions, the computational procedures and, finally, the result of the computation to be released must be exactly specified. Each such delimited and correctly defined task will be henceforth called a partial planning problem.

If we now mechanize not isolated planning problems independently, but rather a *series of strictly interrelated partial planning problems*, where the results of one or several partial planning problems are used by one or several others as inputs; further, if all this is based on a uniform system of economic indicators and uniform technical solutions this will constitute a *computerized planning system*. This allows us to compute long chains of planning problems, following upon each other quickly, operatively, without human interference. (Of course, the chain can be also broken at any point, if interference becomes necessary.)

Both the economic and the technical structure can be changed, in principle, any time; practically it is not expedient to change them too frequently, since this would make a continuous operation of the system impossible. In general, it is expedient to insist upon the given economic and technical structure within a planning round, except when the conditions and requirements of planning work do change essentially. This means, of course, some formal strictures against the complete formal freedom encountered in manual computations, but it is a low price to be paid for the possibility of *unlimited repetition*, which is the technical basis of planning variants.

The *first group* of partial planning problems, organized into the system, are those central computational problems which have to be performed at the start of a planning round. Comprehensively we call them the tasks of *Starting the round*. Here belong the transformation and arrangement of past facts – aggregated *long time series* and more detailed *basic data* – according to the actual methodology of the given planning round, in a comparable form and their dissemination among the sectoral planners. Here belongs also a similar arrangement of other available *background information*, e.g. international comparisons, etc. And, last but not least, here belong the computations of the *a priori macroeconomic analysis* discussed in the preceding section.

The *second group* of partial planning problems includes the *Reception and processing of partial variants*, meaning the variants of sectoral production plans, living standards and strategies of foreign trade worked out.* In due course the original data of the partial variants are transferred to *mechanical information carriers complemented* with

*In the first round of long-term planning the partial variants were worked out by expert groups, in the second round by the departments of the National Planning Office, relying on partial conceptions prepared by the sectoral ministries. The economy was broken down into 46 sectors in the first round and into 31 in the second.

such indicators which can be mechanically derived from the original data called upon to characterize the conceptual alternatives. Then the index numbers, rates of growth, coefficients and other indicators necessary for a comparative analysis of the partial variants *are computed and printed*. Here belongs also the construction of *artificial variants* mentioned in connection with the HOVA model.

The *third group* of partial planning problems is the core of the whole system: this consists in producing national-level, in short: **MACRO-VARIANTS**.

Within its scope first, as a preparatory step, usually so-called *rough sums* are derived. From among the variants of each sector a single one is selected, its indicators are accepted without modification and this set is summed up for the economy as a whole. The procedure is essentially the same as the first step in the traditional process of plan coordination, with the difference that it is performed with a computer. Accordingly, we can form also variants by choosing a different set of sector variants to be summed up. The macrovariants thus coming about are called *combinations*; they are usually not consistent. The purpose of the procedure is to provide mutual information for planners about each other's ideas and about the national economic effects of the aggregate of these ideas. On the other hand, this provides a preliminary survey of the direction and extent of inconsistencies that should be resolved through later computations.

For producing interpretable and consistent macrovariants we use the *national-level, multi-periodic, linear programming models* already reviewed. It hardly needs emphasis that the macrovariants produced by the model are not considered "optimal" or "ideal" plan variants, or such as "should be approved". When need arises at a given stage of planning, then, with strictly realistic constraints, efforts are made to work out such macrovariants that can play the role of an acceptable plan variant in the practical process of plan coordination. These are called "*coordination variants*". Rather frequently, however, computations are made, with extremal, less realistic assumptions, with the purpose to study the impact of certain factors on the whole economy; the macro-variants thus produced are called "*exploratory variants*".

Finally, the *fourth group* of partial planning problems is constituted by various computations serving the **ANALYSIS OF MACROVARIANTS**. It allows a fast and efficient evaluation of a large number of macrovariants. Here belongs, e.g. *the system of tables presenting the results*, which communicates the comparable results of several macrovariants in the accustomed form of balances and indicators. In the framework of this analysis we again revert to the problems of the aggregated computations performed in the framework of starting the round: now the future domain delimited in the framework of the synthesis is put into the perspective of *a survey covering almost half a century*. Finally, here belong the input-output computations reviewed among the analytical models.

The partial planning problems organized into a system have been listed here briefly in a *logical* order. In reality, of course, planning never proceeds in a single leap, without interruption and returns, along the the logical chain from its beginning to its end. On the basis of later results a repetition of an earlier logical step, an *iterative* approach to the end result belongs to the essence of quantitative synthesis, to the dialogue between the parts

and the whole. Within a planning round we frequently returned to earlier problems, the computations described above were carried out in reality not one after the other, but *in many repeated steps*. The analysis of the macrovariants always leads to new macro-variants, since there always emerge questions of the type "what if", to which an answer can be given only by producing a new variant. Frequently also new partial variants are needed, since many questions cannot be answered by the already existing ones. This step, the setting up of new partial variants was also repeated once in each round. Unfortunately, there has been no occasion as yet for several iterations, amounting to a deeper dialogue about the merits of the matter, and transcending the mere correction of mistakes. An iterative repetition is possible in the same way in a computerized planning system as with the traditional methods of quantitative synthesis, and technically it is generally easier to perform. Nor is there any technical obstacle to changing the depth or width of the computations, e.g. to repeat an earlier computation in greater detail or in a more aggregated form. But the computerized system has an essential advantage: it keeps the earlier results in comparable form. Thus, the variants *developing after each other become simultaneously comparable*. From the subjective viewpoint such comparison is not always comfortable, because the differences may be either too big or too small. But economy-wide planning can become a "learning process" only if it retains and critically studies its own earlier results. This can be realized only when the process of iteration, repetition is organized with the aid of a computer.

Lessons and tasks

In the framework of long-term planning the *first operative computerized planning system has come about*, solving various problems of quantitative synthesis and applying to some problems *mathematical-models*. This, in itself, is a progressive step in improving the planning methods.

The computerized system, securing the operative work and the model computations performed ensure a *higher standard of quantification on the national level* than the traditional comprehensive computations which were strongly limited by their narrow technical possibilities. Particularly the "exploratory variants" formulated in the interest of purposeful investigation and the qualitative conclusions drawn are suited *for confirming or refuting economic and policy assumptions, for deriving new knowledge*. In long-term planning, conceived of as a continuous process, all that provides a summary evaluation of quantification performed up to a given date, serves as raw material for further reasoning and as a starting point for further work.

With the aid of the system we succeeded, in both rounds of long-term planning, in arriving at useful computational results in a few months, through many-sided series of computations. Comparative analysis of the economy-wide variants revealed a few important interrelations of long-term economic growth in Hungary, e.g. the interactions between the patterns of production, consumption and foreign trade and the rate of growth. All this contributed also qualitative economic conclusions to the comprehensive work.

With the aid of the new technical tools the *quantitative synthesis fulfilled its role in long-term planning in the formulation of the macro-economic conception.*

At the same time, the system does not fit yet smoothly into the whole of the planning process; therefore *the role of the quantitative synthesis, its feedback into actual decision problems in particular fields is not sufficiently effective for the time being.*

The initial immaturity of the quantitative synthesis contributed to this; the limitations of the system of indicators and of the economic content of the models, our own inexperience in choosing the "tactics" of modelling and many similar factors are hindering progress. The continuous information of the wider planning apparatus about the course of computations was also deficient: active participation of the sectoral planners was missing. These typical problems of infancy can, nevertheless, be solved relatively quickly and they have begun to ease already. There are, however, two essential factors requiring a longer period of purposeful methodological improvement which it is worthwhile to scrutinize more thoroughly in the interest of future development.

We had asked for a quantification of the long-term *development perspectives* of the particular *sectors* and of the *complex intersectoral development programs* (cutting across industries) *in variants*. Although there is a wide consensus that the strictly sectoral framework is insufficient background for the actual development decisions, the complex programs have not yet been quantified in any of the planning rounds.

We have already reviewed, in connection with the planning models, the consequences of the fact that we "ran out" of sectoral variants. The "artificial variants" computed for the HOVA model improved the trustworthiness and interpretability of the computations, but, obviously, they could not provide the same result as if real, well worked out technological and economic alternatives had been judged in the framework of model computations.

We asked those working on sectoral variants to characterize the development alternatives in a complex manner, extending beyond production and investment also to labour and material inputs and interindustrial as well as foreign trade relationships. This is a basic deviation from the practice of short-term planning where this complex characterization is not the starting point of the synthesis, the information basis of the decision process, but emerges only at the end of the planning process, as a result of synthesis, through a broad division of labour, with the participation of the functional and the coordinating organs. This is why this task was unusual for the narrower planning staff and assumed the creative participation of the so-called "external circle" (planning, designing and research institutes, university departments, experts). But this cooperation was not smooth. Depending on the stages of work the bulk of the work devolved once on the one, next on the other side. Thus, *particular, sectoral long-term planning methodologies* could *not* develop. The link between the conceptual work in partial fields and the quantification necessary for synthesis (uniform by its nature) was missing.

In this context the quality and reliability of the input data of quantitative synthesis became open to doubt. In the formulation of more general, macroeconomic, conclusions this source of error could be more or less taken into account and also a certain offsetting

of estimation errors in the many partial fields could be reckoned with. (This has been also verified by some data checks and sensitivity analysis.) But the conclusions concerning the partial fields could be realized under such conditions only in the framework of a continuous dialogue securing also thorough checking; this, however, was made difficult because the planning staff was simultaneously engaged in other planning activities as well.

Thus, a certain distance emerged in long-term planning activity between the application of modern tools of planning, serving the quantitative synthesis, on the one hand, and the development of general long-term planning methods, on the other. In preparing for the third round of long-term planning these tasks must be solved in no uncertain manner.

The other factor limiting the feedback effects of quantitative synthesis is most likely not particularly of a lasting nature, yet of a more general character. It derives from the fact that in the practice of planning, extending over several decades, plan coordination is not only aimed at a quantitative equilibrium, at the creation of consistency, but also comprises the exchange of opinions and the conflict of interests. *Computations* and the *discussions* proceed together, overlapping. Therefore, the macrovariant gradually emerging through several iterative steps is not only consistent – depending on the organization and quality of work, more or less so – but *coordinated* as well, that is, the accepted proposal of the planning machinery for economic policy.

From this aspect every mechanized procedure differs basically from the traditional planning process. The mechanized procedures may differ from each other in method and the extent of achieving consistency, but they completely agree in separating the *production* of a macrovariant from its *acceptance*. This should be obvious, since the former can be mechanized, while the latter cannot. Separation of the two does by far not mean that subjective, human factors have not the same weight and determining role in the mechanized procedures. Only the weight of human work falls onto *another place*: on the construction of the procedure itself, working out the input data, and on the interpretation and economic policy judgement of the macrovariants produced. Exchange of opinions and conflicts of interest takes place *before* and *after* operating the procedure, not intertwined with the individual steps of the computation.

Further, the mechanized procedures allow simultaneous comparison of many alternatives: this is precisely one of the major purposes of their application. But the planning staff has no practice in a simultaneous and comparative handling of a great number of macrovariants. Particularly the notion of an “exploratory variant” is foreign and unusual – since it need not be accepted or discarded, no agreement or objection is required, it is only food for thought.

It follows that the integration of computerized procedures into the planning process assumes new forms of human contribution and cooperation, a reinterpretation of the notion of coordination, and a *new kind of organization for the coordination procedure* separated from the act of “working out” the variant. It seems the latter is the more difficult one. During the two rounds of long-term planning we have attained some results in constructing and operating the computerized procedures. But the dialogue aimed at the acceptance or discarding of the “coordination” variants, or at the utilization

of the "exploratory" variants in the formulation of concepts was still limited rather narrowly. The methods for utilizing widely the macrovariants produced in a new manner, and interpreted in a new way, as well as the forms of organization must be still found.

At the same time practice has already proved the practical advantages of the computerized planning system serving quantitative synthesis. The existing system has come about in the framework of long-term planning and was devised in its actual form for long-run purposes. But, naturally, it could not rely on anything else but the experience of short and medium-term planning over several decades. Therefore, as regards its main features, the *system is not exclusively, not specifically of a long-term character*; as a matter of fact, its general framework, independent of the time horizon, is more mature than its long-term properties.

In the system of economic notions and indicators of *long-term* planning, then, in model construction and in quantitative investigations and analyses, the requirements of the long perspective will have to be more resolutely asserted. In addition, we wish to achieve that — in fields most important from the viewpoint of long-term planning — the system should be complemented by partial models.

At the same time, the more general results attained in the course of developing the system, which are independent of the time horizon, first of all the experience of systems organization, can be also utilized for shorter ranges of planning. Considering, however, the intellectual effort needed for organizing a computerized planning system and the labour requirements of continuous operation, it would not be expedient to create and operate independent, parallel systems for the planning activities with different time horizons. On the other hand, nor would it be expedient to push uniformization to an extent jeopardizing the enforcement of particular features necessarily derived from the different length of planning horizons.

There are, however, quite a few problems which emerge equally in planning for different horizons, or differ only to slight extent. Such are, e.g. the supply of basic data, the processing of the computations comprising the results of sectoral planning (partial variants), the construction of national balances (accounts) and so forth. As a first step, it is these which should be organized into a *uniform and common system* — for the time being a narrower one than the present pattern of the long-term system. Such uniform computerized planning system might indeed release much intellectual energy for the development of justified peculiarities, really depending on the length of plan horizons. These could be worked out as ramifications of the common system and could be linked more loosely or closely, as necessary.

The President of the National Planning Office approved in 1976 a central program extending to several years, for the improvement of economy-wide planning. This program provides for the uniformization and computerization of the common core of economy-wide computations in the planning activities with different time horizons (annual, five-year and long-term). The uniform computerized planning system has to be ready soon to be practically used in the elaboration of the sixth five-year plan (1981–85) and in the third round of long-term planning.

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КОЛИЧЕСТВЕННЫЙ СИНТЕЗ В ПЕРСПЕКТИВНОМ ПЛАНИРОВАНИИ

МАРИЯ АУГУСТИНОВИЧ

В венгерской практике долгосрочного (15–20-летнего) народнохозяйственного планирования применяются новые методы количественного синтеза. В статье излагаются положения теории планирования, обосновывающие введение этих методов модели математического планирования, разработанные для получения плановых вариантов модели анализа, использованные в исходных макроэкономических прогнозах и в более глубоком изучении плановых вариантов. Также рассматривается система планирования при помощи ЭВМ, сложившаяся в силу практических нужд, накопленный до сих пор опыт по ее применению и задачи по усовершенствованию этих методов.

P. GLATTFELDER

INTERNATIONAL COMPARATIVE PRICE CALCULATIONS WITH INPUT-OUTPUT TABLES

The study summarizes the results of a two years' experimental work. The aim of the investigation was to analyze on the basis of input-output tables the different and common features of pricing methods in the socialist countries. The basic question of the investigation was how the producers' price level and price proportions would be altered in any country if the pricing methods were "imported" from another country where these methods are characteristic in relation to the producers' prices (tax paid for the use of fixed capital, income tax etc.).

In the early 1970s a comparative analysis started – in the framework of a co-operation programme of the price offices in CMEA countries – to explore the possibilities of bringing closer the domestic price calculation methods and principles. It was found in the course of discussions preparing the project that it was not sufficient to demonstrate and evaluate verbally the differences in price calculation methods – and, mainly as a consequence, those in the relative proportions and levels of producer prices – but some numerical comparison would be also necessary.

That is how it came to be suggested that this numerical analysis should be carried out by relying on input-output tables, related to the subject – also included in the program – concerned with applying input-output tables in price calculations and price planning. The idea was approved by the presidents of the price offices of member countries, and they commissioned the competent Hungarian, Bulgarian and Czechoslovakian research institutes to prepare the investigation.*

The first version of the concept was elaborated in Hungary by the Price Institute of the National Office for Prices and Materials, together with a detailed methodology. This was practically a minimum programme, assuming from the methodological aspect application of the so-called statistical simulation procedure, and as regards data supply the knowledge of the input-output table of one country, and that of the lower wings of input-output tables of identical structure of other participants.

It was successfully proved that it was statistically possible to produce for three countries such (standardized) input-output tables of identical contents and structure

*Participants in the common work were B. Ilev and N. Hristovic on part of the Bulgarian Price Office, I. Rendek and L. Janovská on part of the Czechoslovakian Research Institute. Hungarian calculations have been so far accomplished jointly with the author by László Halpern.

on whose basis the method is applicable, that is, the price levels are comparable, at least as regards orders of magnitude.

The present study sets forth the initial conditions of the examination, and the results of Hungarian calculations. First it surveys in detail the main characteristics of the producer price schemes of the three countries. After that difficulties in standardizing input-output tables will be presented. After a survey of economic-statistical preliminaries the statistical simulation method will be discussed, as well as the computations carried out with it, and a few results of these will be reviewed.

The primary feature of the pricing mechanism in the three socialist countries covered by the examination is that price movements and their control take place on the basis of well-defined principles and methods in accordance with the national economic plan. The active components of market demand and supply do play a role, even though with different weights, but this market functions under state control, and the decisive role is still played by central price control.

In the price systems, working with numerous deviations and specific features even within one country, the principles and methods of producer and consumer price formation are mostly different, with deviating practices of establishing industrial, agricultural and other prices, and also the calculations of domestic and foreign trade prices differ much. In view of our subject we wish to briefly summarize those main features of differences between countries, which are found in the *general structure of the price scheme*, and in the economic contents and deviating normative sizes of calculation items to be taken into consideration. Therefore, no such questions are examined as price types and price forms within one country, introduction of world market price changes into national price systems, or various measures taken with a view to price stability, etc.

The main factors of the general producer price scheme are composed in each of the three countries of the following elements:

- material costs
- wages and taxes thereon
- depreciation allowance
- charges on assets engaged
- other costs
- net income.

In the accounting of *material costs* it is the effort of all three countries to have the various basic materials and semi-finished products figure in the calculations at (producer) prices net of turnover tax. At the time of observation (1972) this effort was most successful in Czechoslovakia, some turnover tax was still included in Hungarian producer prices (through material costs), and in Bulgaria also some profit. (Price formation of materials of domestic and foreign origin is different in all three countries, yet both appear at the same place in the producer price schemes.)

Wages and remunerations are extremely varied in each country. The most important are basic wages, complementary wages, bonuses (premia) and rewards, as

well as remuneration of physical and intellectual workers not belonging to the permanent staff, age-bonuses, overtime payments, bonuses for work done under conditions detrimental to health etc. In a few countries prime cost of the product contains also the payment in kind to workers.

Considerable differences exist between the three countries in respect of *levies on wages*. The rate of *social insurance* contribution — first of all to cover financially the general (free) medical care — was 25 per cent of wages in Czechoslovakia, 17 per cent in Hungary, and 20 per cent in Bulgaria in 1972. In Bulgaria and Czechoslovakia the social insurance rate was homogeneous in the whole industry, while in Hungary mines paid 60 per cent of the average value. In all three countries the *tax on wages* is to be calculated in production costs. This tax is practically the net public revenue that firms pay into the budget in proportion to wages paid (as a tax). This tax on wages amounted to 15.9 per cent of wage funds in Czechoslovakia, to 8 per cent in Hungary, and to 8.5 per cent of the same in Bulgaria in the period under examination.

The level of depreciation allowance is regulated by separate legal rules. Payment of the amount of depreciation accounted in the price of the products goes partly to the firm's own investment funds, partly to the central channels of the state budget. Depreciation amounts paid into the budget are almost entirely spent on investment purposes (in Bulgaria still on renewals). In all three countries the industrial average depreciation rate is fixed, from which a deviation is allowed in certain cases. The rate was 4.7 per cent in Czechoslovakia, 5 per cent in Hungary and 7.6 per cent in Bulgaria in 1972.

The charge on assets is practically also a part of net state income, which is accounted by firms among items of production costs. This charge is called upon to motivate the economizing of assets; it amounted to 5 per cent in Hungary as well as in Czechoslovakia, and was eliminated in the meantime in Bulgaria. In 1972 the charge was based on the gross value of assets in Hungary, and on their net value in Czechoslovakia, in the meantime, however, a change-over to basing the charge on the net value of fixed means took place in Hungary as well. Besides, both countries allow partial or full exemptions from payment of this charge in many fields, thus e.g. in Hungary mining and part of the food industry do not pay (calculate) it, and in Czechoslovakia mining pays only a reduced charge (2 per cent).

Other costs accounted in the price are widely diverging. All expenses of technical development, interests on bank credits availed of by enterprises, costs of geological research and prospecting, and numerous other expenses are usually covered from profit or appear in the production costs. Their size was much deviating in each country and in each sector, so there is no room for their presentation here.

As a consequence of the different cost-calculation- and income control systems of the three countries the *net income* of the enterprise is formed on different principles. Independent accounting and effort at minimum profitability are basic principles in all three socialist countries. Therefore, if a producer firm is absolutely unable

Table 1

Main parameters of Bulgarian, Hungarian and Czechoslovakian industrial producer price schemes in 1972

Factors in price calculation	Bulgaria	Hungary	Czechoslovakia
Material costs	Including turn-over tax and some net income	Including some turnover tax	Net of turnover tax
Wage costs	No important difference in components and contents		
Levies on wages			
tax wage (per cent)	8.5	8	15.9
social insurance contribution rates (per cent)	20	17	25
Charges on assets	Ceased	5 ^{a)}	5 ^{a)}
Other costs	Of different character and composition with important sectoral differentiation		
Depreciation (in percentage of gross output)	7.6	5	4.7
Normative profitability	15 ^{c)}	about 15 ^{d)}	22 ^{e)} + 6 ^{f)}

a) On the gross value of assets

b) On the net value of assets

c) In percentage of price

d) In percentage of assets

e) On wages

f) On assets.

to make a profit on its products, a subsidy paid out of the budget will refill the enterprise's financial funds to an extent to provide for at least the planned minimum development and financial motivation.

Among the countries under investigation in Bulgaria the scheme of price formation conforming to the price of production was followed in 1972, according to which the profit accountable in the producer price is calculated first of all by taking fixed assets into account. The price model was somewhat different in Czechoslovakia, where a mixed price formation according to the price of production and the value scheme was asserted, and normative profitability prescribed 22 per cent profit on wages, and 6 per cent on assets. Differing by industries a 10–12 per cent rate of profit on assets was realized in Hungary at that time, while in Bulgaria normative profitability was 15 per cent of the price charged.

The income control mechanism of the three countries differed considerably, yet it was generally characteristic that first of all various enterprise taxes and dues

had to be paid out of the realized net income (profit tax, interests on costs, financing of social and cultural measures, formation of technical development funds, etc.), and it was only from the remaining part of profit that funds for rewards and bonuses and other funds augmenting the workers' income could be formed.

It was the above-mentioned differences in price schemes, or, in other words, price system deviations, that we took into account in our computations and made then the subject of particular analyses as the main causes of deviating producer price proportions. The numerically expressible differences between general price schemes, i.e. price calculation mechanisms are shown in Table 1.

Problems involved by a comparison of input-output tables

Analysis of the effect of different price calculations was carried out by relying on input-output tables. Our starting-point was that for the years 1972 or 1973 a statistical factual table was available in each of the three countries, and mutual exchange of certain parts of these, as well as their statistical processing would allow application of the method and a comparison of results.

The published table of Hungary for 1972 was sent, in a breakdown of 21 sectors, to the two other countries. On the Hungarian part only the lower wings of the 24-sector Bulgarian table and of the 26-sector Czechoslovakian table was needed, since the simulation method applied required no more.

The first step of the calculations was to make the tables comparable. The requirement was not only that the three tables should be of identical aggregation (sectoral breakdown), but also that the economic-statistical contents of the sectors should match. Otherwise, Hungary and Czechoslovakia followed a traditionally developed nomenclature, while the Bulgarian table corresponded, from the statistical aspect, to the standardized form suggested by the CMEA.

The most detailed (90-sector) statistical factual table suited for comparison was prepared in Hungary. Therefore, we undertook to rework our balance in accordance with the Czechoslovakian and Bulgarian nomenclatures and to send these "hybrids" to the other two countries.

The difference between the three input-output tables appeared not only in their nomenclatures, but also in the economic-statistical contents of particular sectors. These were practically methodical differences which were partly corrected subsequently and partly (in view of their slight weight) left out of consideration. Methodologies of compilation were different also from viewpoint that input-output tables are based in Hungary on gross output, while in Czechoslovakia on gross turnover. A table based on turnover is drawn up – in the processing phase – also in Hungary, and the two different solutions sometimes show important differences. Therefore, it would be difficult to compare the internal quadrants of the Hungarian and Czechoslovakian input-output tables, but comparison of prices was less disturbed by this circumstance.

Table 2

Comparison of the aggregate price structures of Czechoslovakia and Hungary in 1972 (per cent)

	Czechoslovakia	Hungary
Material inputs	64.1	55.0
Depreciation	3.6	4.1
Wages and incomes	15.6	18.2
Accumulation	16.7	22.7

Beside deviations in the internal quadrant it is remarkable that there are important differences also in the lower wings with each of the three countries. Non-material inputs figure in greatest detail in the Hungarian input-output table; in the Bulgarian and the Czechoslovak balances they amount only to three lines (depreciation, wages and incomes, accumulation).

In the handling of both the internal quadrant and the non-material inputs the differing economic contents of factors caused difficulties. In Hungary e.g. depreciation is nothing else than the depreciation of fixed assets, while in Czechoslovakia this is corrected with the residual value of fixed assets scrapped. Similarly, in Hungary such costs as housing support to workers, holiday contribution, etc. appear in the line of wages, while these are accounted separately in other countries.

After converting the three input-output tables into identical structures, i.e. their standardization, statistical comparison of production-technological structures pointed to important differences. It appeared that considerable differences existed both in per unit indicators (import-, wages-, net income-, etc. contents of sectors) and in the final structures of gross and net output. This indicates partly the above-mentioned differences in statistical methodology, and partly such objective circumstances as are explained by the different production-, and technical-technological potentials of the countries in question and, last but not least, by their economic control systems.

The price institutes of Bulgaria and Czechoslovakia carried out a detailed comparative investigation with their own tables as well as with the Hungarian input-output table, demonstrating the deviating and identical features in the production structures of the three countries. We shall not go further into a description of the results of this comparison, since our main task was not the comparison of price calculation methods with mathematical-economic tools. Yet it is interesting to observe data of Table 2 which reflect (on the basis of input-output tables) the national economic price structures of Hungary and of Czechoslovakia.

It appears from the data that the Czechoslovak national economic production calculation differs essentially from ours: the level of accumulation is much lower (by 6 per cent) and wage costs per unit of output are lower, too. These differences strongly affected, as will be seen, also the results of our examination.

Essentials of the statistical simulation method

The statistical simulation method renders the economic and production structures of two or more countries comparable by trying to eliminate the deforming effects of different price systems, and it does this by reaching back not to superficial price differences but to the roots, i.e. to the basic principles of price formation.

As regards its substance the method is not identical with mathematical simulation. In practice it is a not particularly complicated mathematical procedure, which assumes the existence of the following initial information:*

- standardized input-output tables for countries A and B (“standardized” means that the statistical contents and structure as well as the period covered by the balances are identical);

- knowledge of the pricing principles valid in countries A and B, independent of whether these principles are government prescriptions or spontaneous practice; numerical interpretability of these principles and of the actual practice in a breakdown according to the tables in question.

We believe that in the case of two or more socialist countries, in which price calculations and price policy were based on established principles and controlled practice, the conditions of such application are given.

The deviating price formation methods of two socialist countries are explained by the following main reasons:

- differences in calculating imported materials and products as well as in the conversion of Rouble and Dollar prices into domestic currency;

- differences in the formation, weight, and sectoral differentiation of depreciation (depending on the technical-technological differences of assets);

- differences in wages, and in taxes payable on wages;

- differences in the size and proportions of (fixed and circulating), assets engaged, and in taxes payable on them;

- differences in net incomes and in the withdrawal mechanism of net income.

The statistically most acceptable method for comparison of the internal (first) quadrants of the input-output tables, and for elimination of price differences has been so far the following:

- a) standardization,

- b) disaggregation to product- or activity level;

- c) re-pricing on the basis of a comparison of domestic sales (producer) prices or (possibly) of foreign trade prices.

- d) repeated aggregation.

In this way, of course, old problems arise again, namely, that there are no (or hardly any) products manufactured in two different countries and comparable in all their

*In what follows explanation will be given only for two countries, A and B, although the algorithm can be expanded to cover any number of countries or economies.

parameters; or that the disaggregation of balances down to product level is a task extremely tiring, sometimes even insolvable.

Repricing an input-output table of a country according to prices of another country, and demonstration of technological differences in this way is a well-known task. Its simplest method to be carried out with aggregated tables (technological matrices) can be done according to the matrix operation

$$A' = PAP^{-1}$$

where A and A' are the original and the re-priced forms of the technological matrix; P and P^{-1} are the diagonal matrices, the first formed from the price-change indexes, and the second its inverse. This is, however, an oversimplified solution, and the application of sectoral price indexes (or rates of exchange) between two countries leads in practice to an extremely rough result. Besides, this method leaves the whole lower wing out of consideration, i.e. the sphere of primary factors (resources), although they are of decisive importance from the aspect of differences between the price systems of two countries. The comparative analysis of price calculation methods of socialist countries – carried on for long years – has clearly proved that particularities in the internal quadrant, i.e. within the sphere of productive consumption are much less important among the causes of differences than the different methods of formation and sectoral proportions of the lower wing: of imports, wages, profits, and accumulation.

Relying on the above-said the differences in price formation can be formulated and the causes of deviating price proportions can be revealed. The basic principle of the statistical simulation method lies therein. Accordingly, if on the lower wing of one of the standardized balances of two countries we can “simulate” the pricing principles of the other country and subsequently trace it through the whole system, we shall arrive at such a corrected table whose internal quadrant shows but technological differences.*

This train of thought is based, as a matter of fact, on the Marxian theory of value. According to this, the value of goods is determined by the volume of living and embodied labour used directly and indirectly for their production. And if – as it is done with this method – all the “additional factors” weighing on these determining factors are formed according to identical principles in these two countries (while capital and wage proportions keep their structures characteristic of the given country), prices – following the law of value – will have to take mutually approaching proportions. In other words: in accordance with this method the difference between countries A and B is reducible to two main reasons. One is the different relative wage and income proportions, and the other the differences of capital output ratios. And in this way we have arrived where we wished to, since what we need are such tables that differ only because of their basic

*Difference in the supply of assets and in productivity are considered technological differences at this point.

structure. And the well-known two sources of this are to be looked for in the productivity of labour and the level of technical development.

I worked out the basic principle of the simulation algorithm here described in the early 1970s, linked to a research project of the UN Economic Commission for Europe. T. Watanabe had published in an earlier study of his [1] such a version of the simulation principle which is not directed at the examination of price proportions, but at an analysis of structural proportions.

The essential point of the Watanabe method is that for the comparison it does not "simulate" vectors of the lower wing but those of the right hand side: Another difference is that in simulating price proportions we do not fit the specific vectors of one country in the input-output table of the other one (as is done by Watanabe and several others), but we *simulate the formation principle* of the specific vectors. [2, 3]

In connexion with the procedure set forth I wish to point out a few further aspects. One is the advantage that with this method various degrees of "filtering" are conceivable depending on what is required by economic analysis. It may happen that the analysis is intended only to reveal what the different taxation systems mean for the two economies, or, more exactly, what the effect of this difference is on prices or the production structure. In this case it is enough to simulate this single factor only. It cannot be left unsaid, either, that really "refined" computations could be carried out only with the aid of input-output tables broken down to products or groups of products. I think, however, that experimental computations allow more aggregation.

A further remark has to be made here: in order to "simulate" the "lower-wing-formation-principles" of the other country it would be enough, theoretically, to have the input-output table of one country and information on the price formation "principles" valid in the other country. In fact, however, none of these "principles" are asserted clearly and consequently. Therefore, simulation will be more exact if actual (statistical) values are also known, as actual impact of the principles, and (also) used in the computations.

Knowing the internal quadrant of the other country, and extending the simulation principle on wages and assets (their proportions) we can, in principle, produce a full identity of price proportions. In this way the input (technological) or the production structures of the two countries can be evaluated "in pure form", without the distorting effect of prices. So far, however, we have not performed such an analysis.

One weak point of the method is related to the fact that part of the primary resources (factors) is difficult to assign clearly to living labour or exactly to assets. This holds particularly for some of the net income elements. Exactly for that reason, in the majority of cases the linking of these with the two determining factors can be done with satisfactory thoroughness only as a result of a long preliminary economic analysis (special production functions, factor analyses, etc.). Such analyses, however, have been carried out in several countries as far as I know, so that in principle there is no obstacle to further perfecting the procedure. It must be questioned, too, whether it is correct to identify living labour proportions with wage proportions, or it is expedient to "simulate" already the wage proportions. This needs further investigation.

The computations

In the course of our computations we stimulated the Czechoslovak "specialities" on the lower wing of the Hungarian input-output table of Czechoslovakian structure, and on that of Bulgarian nomenclature the Bulgarian ones. The question was, how the Hungarian sectoral prices of production (price indexes) would change if some price formation method were not applied according to Hungarian principles but, e.g. according to Czechoslovak ones. In the first phase, therefore, the lower wing of the Hungarian input-output table was transformed in accordance with the price formation principles of the country under examination. In this way the lower wing of the table changed and so did also its price sum.

It needs no particular proof that a change in the price sum, i.e. in the value of gross output affects also the material costs of the same table. This is practically an infinite iteration process; with the new price indices each row of the matrix of material inputs, i.e. of the internal quadrant, has to be modified. Thereby the total material costs change, which again affects the price sum. This must be entered in material inputs, and so on.

The two above-mentioned steps can be replaced by a single algorithm with a finite number of steps if we write the classical input-output price equation:

$$p^* = p^*A + a^* + v^* + \sum_{i=1}^n k_i^* \quad (2)$$

where

p^* is the vector of new prices (price indices)

A is the matrix of the so-called technological coefficients computed from the internal quadrant (incl. also import material inputs)

a^* is the vector of depreciation allowance in percentage of gross output

v^* is the vector of wages and of incomes of wage character in percentage of gross output

k_i^* is the row vector of the i -th kind of net income, similarly in percentage of gross output.

In Hungarian computations v^* , i.e. the wage vector, was assumed to remain unchanged, i.e. the question was not examined, how producer price proportions would change if also the sectoral per unit wage costs were taken over from the other country.

We dealt extensively with the simulation of a^* , i.e. depreciation, whose deviating character (in regard of both proportions of fixed assets tied up, and depreciation rates) considerably affects relative price proportions. Here again only the role of the different depreciation rates was examined, leaving it out of consideration that the different capital supply of corresponding sectors is at least of such weight (if not larger) among the causes of differences.

The k_i^* vectors, i.e. price factors of net income character have also been drawn into the scope of simulation. Their number was not large, since in the input-output table of

the other two countries they appeared only in a contracted form, i.e. in one row. Knowing, however, the size of a few of them (from the methodological documents of the countries), some approximative computations could be still done.

Finally, the price equation (2) had to be solved for p^* and in a way that instead of a^* an a^* in accordance with the principle of another country was used and, instead of the corresponding k_i^* -s, the amended net income items:

$$p^* = (a^* + v^* + \sum_{i=1}^n k_i^*) (E-A)^{-1} \quad (3)$$

in which $(E-A)^{-1}$ is the so-called Leontief inverse.

In the course of our computations practically this p^* price(-index) vector was determined separately, first with the Hungarian input-output table converted according to Bulgarian and then according to Czechoslovak principles. In the solution we applied a multiple-stage approximation: first only depreciation differences were simulated, then various net income formation principles, and, finally, all of them together.

Computations carried out with the Hungarian input-output table transformed according to the Czechoslovak nomenclature

As I have mentioned earlier, computations have been carried out so far only experimentally. Because of this in certain fields only rough results have been attained, as it appears also from the following.

In Czechoslovakia the average *depreciation rate* is 4.7 per cent, while in Hungary it is 5 per cent (in percentage of gross output in 1972). Accordingly, each element of the row of *depreciation* was multiplied by $4.7 : 5 = 0.94$, i.e. it was assumed that we changed over to the rate of 4.7 per cent in Hungary. Sectoral differentiation was not applied, even though factual data (dispersion) would have encouraged us to do so.

In regard of *wages and personal incomes* no correction was used, deviating wage proportions, i.e. wage levels were interpreted as given.

The *charge on assets* amounted in Hungary to 5 per cent of the gross value of assets in 1972, i.e. in the year of the input-output table under examination, in Czechoslovakia this 5 per cent was computed after the net value of the assets. Therefore, the charge was corrected to the suitable level on basis of the Hungarian sectoral proportions, between net and gross values. Apart from this, we did not take sectoral particularities into consideration, which are though more important in this instance, since partial and full exemption from payment of the charge is granted in a wide sphere in both countries.

In contrast to Czechoslovak computations we did not perform any transformation in the row of *other net incomes*. This was justified by the fact that not a single numerical

Table 3

*Assumed changes in Hungarian producer prices
if a few Czechoslovakian price formation principles were adopted*

Sector	Price index
1. Agriculture	96.9
2. Forestry	94.8
3. Fuel industry	94.5
4. Electric industry	92.0
5. Ferrous metallurgy	91.2
6. Non-ferrous metallurgy	90.7
7. Chemical industry, rubber industry, cement-asbestos industry	92.8
8. Machine building industry	92.9
9. Metal working and electrotechnical industries	93.6
10. Building materials industry	91.4
11. Wood processing industry	94.5
12. Paper- and cellulose industry	91.8
13. Glass- and fine ceramic industry	92.7
14. Textile industry	92.7
15. Apparel industry	94.7
16. Leather-, fur-, and shoe industry	94.4
17. Printing industry	93.9
18. Food industry	95.2
19. Cold-storage industry, mineral water, tobacco industry	93.3
20. Other activities	95.2
21. Construction	93.3
22. Technical designing activity	97.8
23. Transport	90.8
24. Communications	91.8
25. Domestic trade and catering	94.0
26. Foreign trade	97.5
National economy total:	94.2

value of a factor affecting the formation of the net incomes was available for the computations.

The simulation carried out exactly in this field by the Czechoslovak partner produced for us maybe the most interesting results. This was because they had at their disposal the standardized tables of the two countries, and they simulated also the specific net income. It became apparent that in Hungary the indirect and direct profit level of each branch is so much higher that, "importing" it, considerable producer price rises would take place, in Czechoslovakia, in a few cases exceeding even 60 per cent.

The acceptance of the Hungarian net income ratio would have caused the highest rise in the Czechoslovak iron- and non-ferrous metallurgy, as well as in the fuel industry.

A still high (over 30 per cent) rise would have taken place in the paper- and cellulose industry, and in electric energy production. Price reduction would have occurred only in two sectors: in forestry and in the so-called other material production.

All this is remarkable also because our work concerned with the further development of the price system raised – though approaching from another aspect – practically the same problem, namely, that in our days the direct and indirect profit contents of Hungarian producer prices is already much higher than necessary. On the other side the same fact was supported also by the Bulgarian computations.

Our results showed – as could be expected – that accepting the average Czechoslovak depreciation norm would cause a 0.6 per cent reduction of producer prices on a national economic level in Hungary (with a relatively low sectoral dispersion). Least sensitive to simulation were the commercial sectors and the agricultural branches. More important changes came about in the metallurgical, fuel industrial, transportation, etc. branches requiring large fixed assets.

The deviation that results from the difference in the basis to which the charge on assets is projected is much bigger. (I wish to remark that after 1972, i.e. the year covered by the input-output table, the charge payable on the net value of assets was introduced also in Hungary, so that this variant is only of a formal character in 1976).

Changing of the basis of the charge on fixed assets would have brought about a 5.2 per cent reduction in producer prices in the 1972 price system of Hungary. The largest reduction was again found in the metallurgical, transportation etc. sectors with large fixed assets, while the least affected fields were technical designing activity, commerce, etc.

It follows from the above-said that the joint effect of the two principles, which can finally be summed up in a 5.8 per cent price reduction, affects most the sectors with the largest fixed assets, while technical designing activity, domestic and foreign trade remain almost entirely unaffected. This is demonstrated also by the above results. (See Table 3)

Computations with the Hungarian input-output table converted to the Bulgarian nomenclature

The Bulgarian input-output table had three rows in the lower wing: depreciation allowance, wages and personal incomes, and net income.

As has been mentioned earlier, in Bulgaria the average *depreciation rate* is 7.6 per cent as opposed to the average 5 per cent rate in Hungary. With a view to transformation of depreciation the Hungarian amortization row was multiplied by $7.6 : 5 = 1.52$. (In this instance we again disregarded that the sectoral values of assets are different and so are sectoral average depreciation rates. This is because these were not known.)

In the case of *wages and personal incomes* we proceeded in a way similar to the examinations carried out with the Czechoslovak input-output table, i.e. we did not perform simulation here, either.

The *net income* formation of Bulgaria essentially differs from that of Hungary. Enterprises do not pay charges on assets and a further numerically expressible difference is that the wage tax is 20 per cent as contrasted to 25 per cent in Czechoslovakia and Hungary.

Since in the course of transformation the charge on assets appearing in the Hungarian input-output table was listed among the net income elements, the net income row of the Hungarian input-output table according to Bulgarian nomenclature had to be amended in two aspects. In the first phase the net income was "cleaned" of the charge on assets. (In the course of this the charge known in Hungary was deducted from the income row.) In the second phase the above-mentioned difference in the wage tax was eliminated in a way that the net income row was corrected by 5 per cent of wages and personal incomes.

In practice five kinds of computations were made, in which the question was posed in the following way: what price changes would it cause (or, what price indices we would get) in the Hungarian price system on sectoral level, if we took over from the Bulgarian price system

- the deviating average rate of depreciation
- elimination of the charges on assets
- reduction of wage tax and elimination of the charges on assets
- the deviating average rate of depreciation and the elimination of the charges on assets,
- all three factors.

The three kinds of differences taken into account produced in the course of computations a price index of 91.3 per cent, i.e. an 8.7 per cent price reduction on national economic level. (See Table 4). We found that while adoption of the depreciation principle would have caused a producers' price rise of 5.3 per cent in Hungary, elimination of the charge on assets would have entailed a 12 per cent price reduction, and the joint effect of the two factors a 6.7 per cent price reduction.

Out of the five kinds of computations only two are numerically presented in Table 4: those producing the most significant results. They are the following: price indexes received by adopting the depreciation principle (first variant), and the fifth case: taking into account all factors.

It need not be proved in length that – as in the case of comparison with the Czechoslovak price system – the change in depreciation principles caused the largest rise in prices in the capital-intensive sectors (energy industry, transport, etc.), and the smallest rise in manufacturing and in commerce. Adoption of the Bulgarian principle with regard to charges on assets (i.e. their elimination) would reduce the Hungarian sectoral price levels practically in the same proportion.

It also appeared from the computations that a reduction by 5 per cent of the wage tax according to the Bulgarian principles would reduce the national economic price level by a further 2 per cent.

Table 4

Assumed changes in Hungarian producer prices in case a few Bulgarian price formation principles were adopted

Sector	Price index in case of adopting	
	the depreciation principle	all principles
1. Electric- and heat-energy industry	110.8	96.6
2. Fuel industry	110.4	98.5
3. Ferrous metallurgy	107.4	92.3
4. Non-ferrous metallurgy	108.3	94.0
5. Machine building industry	104.7	88.7
6. Chemical industry and mineral oil processing industry	107.3	91.6
7. Building material industry	107.2	92.5
8. Wood processing industry	104.8	89.7
9. Paper- and cellulose industry	106.0	89.5
10. Glass- and fine ceramic industry	105.4	90.1
11. Textile industry	104.5	89.3
12. Paints and dyes industry	105.1	88.2
13. Leather-, fur-, and shoe industry	104.0	89.4
14. Printing industry	104.5	87.5
15. Food industry	105.3	94.0
16. Other industries	103.8	90.1
17. Construction	104.2	89.3
18. Agriculture	104.6	95.2
19. Forestry	104.4	92.2
20. Transport	112.0	101.5
21. Communications	108.3	95.2
22. Commerce	101.8	82.3
23. Other material activities	102.8	88.1
National economy total:	105.3	91.3

Upon the basis of the preceding it may be stated that, taking into account the three basic differences in the Hungarian and Bulgarian price calculation principles and the 91.3 per cent price index expressing them, the approaching of the Hungarian producer price system to the Bulgarian one would entail a reduction of producer prices except in the transport sector.* The smallest fall in prices would appear in the basic material industries

*Even though price reduction is mentioned in every case, it is in fact cost reduction or increase that is involved. Whether this would be followed by actual change in prices is determined by economic policy.

and in agriculture, the largest one in the traditional light industrial branches, such as the leather-, fur-, and shoe industry, the printing industry, etc.

*

The methodological problems and practical computations briefly surveyed in the foregoing represent only the first phase in an investigation programme planned for a long term. In the course of computations several simplifying assumptions were used, which considerably reduce the value of practical results, yet it was not possible to lift them for want of some basic information. The main objectives of the phase of work facing us are the following:

- we intend to analyse the causes of deviations of elements in identical squares of the input-output tables used, and the possibility of eliminating differences of statistical origin by further refinement of standardization;
- we wish to widen the mutual exchange of information in the field of presently missing data; this would be needed in connexion with income regulation, in the sectoral indices of charges on assets and the staff employed, and in a few other fields;
- the simulation technique itself needs to be further developed, particularly with a view to the comparison of net income formation and withdrawal (taxation) mechanisms; a special optimization model may be elaborated and also linked with simulation.

In the course of our work accomplished so far we have found that it is possible to overcome difficulties involved by the limited availability and comparability of input-output tables of various countries. Experience gained so far has confirmed the justification of such procedures as are based exactly on incomplete information supply. To this is added the fact that the examination phase now closed served basic methodological purposes and not those of economic policy, so that the drawing of further theoretical conclusions could not be undertaken.

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МЕЖДУНАРОДНОЕ СОПОСТАВЛЕНИЕ МЕТОДОВ ЦЕНООБРАЗОВАНИЯ
С ПОМОЩЬЮ БАЛАНСОВ МЕЖОТРАСЛЕВЫХ СВЯЗЕЙ

П. ГЛАТТФЕЛЬДЕР

Автор излагает результаты двухлетнего этапа экспериментальных работ по анализу с помощью межотраслевого баланса и отличительных черт методов ценообразования в трех социалистических странах (Болгарии, Венгрии, Чехословакии). Он рассматривает в первую очередь вопрос о том, как изменились бы в той или иной стране уровни и соотношения оптовых цен в случае „импорта” из другой страны методов формирования оптовых цен (плата за фонды, подоходный налог и т.д.).

Автор излагает примененный для целей сравнения т.н. имитационный метод, предпосылкой которого является наличие одинаковых по структуре и содержанию межотраслевых балансов сравниваемых стран, а также точное знание важнейших принципов и методов оптового ценообразования.

Вкратце останавливается он на проведенных до сих пор в Венгрии расчетах, которые наряду с прочим обеспечили возможность совершенствования отечественной системы оптовых цен и, далее, позволили произвести оценку характерных черт венгерской системы цен с точки зрения народного хозяйства других стран.

В заключение автор излагает результаты, методы и важнейшие выводы болгарского и чехословацкого госкомитетов цен, участвующих в расчетах.

Ю. С. ШИРЯЕВ

О ХАРАКТЕРЕ И ФУНКЦИЯХ ЭКОНОМИЧЕСКОГО МЕХАНИЗМА СОЦИАЛИСТИЧЕСКОЙ ИНТЕГРАЦИИ

Рассматривая проблемы развития экономического механизма социалистической интеграции, автор разворачивает концепцию единого планового механизма сотрудничества, органически включающего в себя товарно-денежные инструменты планомерного социалистического разделения труда и анализирует различные стороны процесса становления такого механизма.

Анализ мероприятий, зафиксированных в Комплексной программе, показывает, что преобладающая их доля была успешно выполнена уже на протяжении первого пятилетия после введения программы в действие. Это относится как к мероприятиям в сфере материального производства, так и к мероприятиям, связанным с совершенствованием экономического механизма сотрудничества, в особенности механизма плановой деятельности. Более того, за последние годы была осуществлена или начата реализация мероприятий, которые не были первоначально предусмотрены в Комплексной программе. Вместе с тем, многие вопросы, выдвинутые практикой взаимного сотрудничества еще предстоит решить коллективными усилиями ученых и специалистов стран-членов СЭВ. В их числе немало вопросов, связанных с совершенствованием экономического механизма социалистической интеграции.

Укрепление плановых основ экономического механизма социалистической интеграции

В самом общем виде экономический механизм сотрудничества социалистических государств (как и его высшую, интеграционную форму) можно определить как взаимосвязанную совокупность форм плановой деятельности, инструментов экономического расчета, а также организационно-экономической структуры, обслуживающих взаимодействие национальных народнохозяйственных комплексов, их планомерное включение в систему международного социалистического разделения труда.* Это, таким образом, плановый по своей сути и структуре механизм международного сотрудничества. Он органически включает в себя товарно-денежные инструменты планомерного социалистического разделения труда.

Конечно, в трактовке отдельными исследователями характера и функций данной категории есть определенные различия. Концепции экономического меха-

* Подробнее об этом см. [1]

низма сотрудничества и интеграции социалистических стран различаются главным образом тем, какая роль отводится в них плановым и товарно-денежным рычагам углубления взаимного сотрудничества. В соответствии с этим признаком можно выделить две основные концепции:

а) концепцию единого планового механизма, органически включающего в себя товарно-денежные инструменты планомерного разделения труда. Разновидности этой концепции различаются неодинаковым пониманием соотношения форм совместной плановой деятельности, а также той роли, которая отводится товарно-денежным инструментам в процессе разработки и реализации международных программ;

б) смешанную, „планово-рыночную” концепцию, в основе которой лежит так или иначе признание параллельного функционирования двух относительно самостоятельных механизмов — планового и товарно-денежного.

Хотя дискуссии по вопросу о характере экономического механизма далеко не закончены, первая из названных концепция в теоретическом и практическом планах получила наиболее развернутое научное и практическое обоснование и утвердилась в качестве преобладающей.

Главное преимущество управления социалистической экономической интеграцией состоит в том, что оно не носит косвенного децентрализованного характера, как это присуще регулированию процесса капиталистической интеграции, где постоянно конкурируют национально-буржуазные интересы, а все «коллективное» межгосударственное управление сводится к согласованию «правил игры», к выработке некоторых общих стесняющих и ограничителей для частных или государственно-монополистических фирм...

Все это естественный результат социалистических производственных отношений, преимущества которых познаются и используются ныне коммунистическими и рабочими партиями стран СЭВ также и в международных рамках. [2]

Вместе с тем исследователи, стоящие на этой позиции, отдают себе отчет в том, что формирование целостного планового механизма интеграции — процесс сложный и достаточно длительный, что на современном этапе между отдельными элементами этого механизма могут существовать определенные противоречия.

Как отмечает, например, польский экономист З. Кызык, „преждевременно говорить об оптимизации объединения ресурсов и рабочей силы в разрезе всего содружества”. Вместе с тем возможна частичная международная оптимизация, позволяющая „для выполнения какой-то цели так объединить звенья народного хозяйства многих стран, как будто они являются частью государственно-хозяйственного организма” [3].

Концепция единого планового механизма сотрудничества и интеграции социалистических стран объективизирована самой сущностью социалистического хозяйственного механизма, инструменты которого „представляют собой не что иное, как формы внешнего выражения и движения социалистических производственных отношений. Следовательно, развитие производственных отношений

получает отражение и в хозяйственном механизме общества, организационная структура управления не может не соответствовать структуре и природе социалистических производственных отношений" [4].*

Таким образом, хотя хозяйственный механизм как форма практической экономической деятельности неизбежно выходит за рамки производственных отношений (поскольку включает в себя элементы надстроечного порядка и технические инструменты организации управления), его основное содержание объективно определяется содержанием этих отношений.

Механизм социалистического хозяйствования на международной арене не может отличаться по своим наиболее существенным чертам от внутрихозяйственного механизма, поскольку в обоих случаях мы имеем дело с категориями, обслуживающими, хотя и в различных сферах, движение социалистических производственных отношений. Однако поскольку международный механизм (будучи „дважды производным“) *далее* отстоит от первичных, перенесенных производственных отношений, чем международные социалистические экономические отношения, конкретные различия между ними и внутрихозяйственным механизмом значительнее, чем различия в их исходных основах.

Во-первых, международный механизм сотрудничества и интеграции обслуживает реализацию согласованной (в том или ином объеме) экономической политики ряда государств, а не осуществление единой общегосударственной экономической политики, которая включает в себя множество задач и целей, не являющихся (во всяком случае, непосредственно) объектами международного сотрудничества. Вместо этого он используется для решения задач, не возникающих в рамках отдельно взятой страны. Следовательно, международный и внутрихозяйственный механизм различаются как по способам, инструментам решения конкретных задач социально-экономического развития, так и по их составу.

Во-вторых, международный механизм в качестве одной из своих главных функций должен практически обслуживать разрешение противоречия между растущим уровнем обобществления процесса производства и уровнем обобществления социалистической собственности как собственности государственно-национальной. (Внутрихозяйственный механизм используется для решения другой задачи — для повышения уровня обобществления производства на деле в условиях, когда собственность уже обобществлена в общегосударственном масштабе).

В-третьих, международный механизм значительно более „чувствителен“ к разного рода элементам перераспределенческих отношений, поскольку должен обеспечивать присвоение каждым народнохозяйственным комплексом всех результатов его экономической деятельности, кроме тех случаев, когда сущест-

*Близкий к этому тезис высказывает А. Сергеев, который пишет, что „хозяйственный механизм — это не случайный набор разрозненных элементов ведения хозяйства, а объективно необходимая форма реализации отношений собственности“. Это по своей сути социальный механизм" [5].

вует и осознанно реализуется в общих интересах социалистического содружества та или иная потребность в перераспределении эффекта международного кооперирования (например, в пользу менее развитых в прошлом стран).

В-четвертых, пожалуй, наиболее крупные различия существуют в институциональных компонентах международного и внутрихозяйственного механизмов. Организационная структура управления сотрудничеством по общему правилу не включает в себя органы непосредственного управления теми или иными сферами экономической деятельности. Они ограничиваются обычно обеспечением контактов хозяйственных органов различных уровней, взаимного обмена информацией, наблюдения за ходом выполнения согласованных решений и т. п.

Различия между международным и внутрихозяйственным механизмами имеют объективный характер. Они будут существовать до тех пор, пока будет сохраняться государственная организация экономической жизни. Эти различия, при прочих равных условиях, будут тем меньшими, чем меньше будут расхождения между национальными хозяйственными системами отдельных стран (хотя даже при „полной” унификации последних отнюдь не исчезнут вовсе).

Поэтому проблема целесообразного сближения используемых в отдельных странах экономических инструментов хозяйствования имеет, на наш взгляд, весьма существенное значение для повышения эффективности международного экономического механизма сотрудничества и интеграции. Причем, дело не сводится, конечно, к сближению ради сближения, а к созданию максимально благоприятных предпосылок для развития хозяйственных связей на всех уровнях народнохозяйственных структур, к преодолению сложившегося разрыва между совместной плановой деятельностью и средствами ее практической реализации.

Однако для этого нужны существенные преобразования не только в международном механизме (создание надежной системы информации, улучшение взаимного изучения национальных рынков, совместное поддержание сбалансированности производства и потребления важнейших товаров и услуг на многосторонней основе и т. п.) Здесь не обойтись без решения сложных вопросов, связанных с расширением возможностей (и стимулов) участия в взаимном разделении труда всех основных звеньев народнохозяйственных структур управления. Эти вопросы во многих отношениях приобретают ключевое значение.

Основной предпосылкой эффективного развития внешне-экономических связей является экономически обоснованное планирование, в особенности среднесрочное и долгосрочное планирование на народнохозяйственном уровне. Используемые в сфере внешнеэкономической деятельности отдельных стран хозяйственные инструменты должны быть подчинены задачам выполнения планов. В то же время, в силу обратной связи, они должны предоставлять планирующим органам экономическую информацию, необходимую как для разработки проектов планов, так и для корректировки тех или иных плановых заданий в ходе их реализации.

Условием налаживания действенного хозрасчета во внешнеэкономической сфере является установление общей (или взаимосвязанной) системы нормативов, связывающих в одно целое системы хозяйственного расчета, используемые во всех хозяйственных организациях и звеньях управления, непосредственно участвующих во внешнеэкономической деятельности. Это означает, в конечном счете, установление непосредственной связи между движением валютных средств и средств во внутрихозяйственном обороте. Именно отсутствие такой связи до последнего времени лежало в основе обособления хозрасчетных систем внешне-торговых и промышленных, а также других хозяйственных организаций.

Таким образом, формирование экономического механизма, адекватного целям и задачам интеграционной программы, предполагает приспособление всех его инструментов к обслуживанию всестороннего взаимодействия национальных хозяйств. Это осуществляется путем совершенствования форм совместной плановой деятельности на уровне различных хозяйственных звеньев интегрирующихся государств; превращения товарно-денежных инструментов рынка взаимной торговли в средства беспрепятственного обеспечения планового экономического оборота на этом рынке и повышения их стимулирующей роли в деле выбора наиболее эффективных направлений сотрудничества; формирования развитой интернациональной институциональной „надстройки” как условия действенного управления интеграционным процессом; согласованного усовершенствования систем управления внешнеэкономической деятельностью в отдельных странах в целях их более тесного взаимодействия на различных уровнях планирования и руководства экономикой; изменения соотношения между формами сотрудничества на двусторонней и многосторонней основах.

Важным показателем степени зрелости международного экономического механизма сотрудничества социалистических стран может служить, видимо, последовательное замещение „внешних” (заимствованных с мирового рынка) инструментов экономическими инструментами, адекватными новому типу международных экономических отношений. Без этого условия вряд ли можно будет считать процесс формирования экономического механизма социалистической интеграции вполне законченным, хотя в силу ряда ограничений, сложившихся методов хозяйствования и т.п., „простого” решения этой задачи нет.

Кроме того, необходимо учитывать то обстоятельство, что экономический механизм социалистической интеграции должен обслуживать не только углубление взаимных связей, но и расширение экономического сотрудничества с развивающимися государствами, взаимовыгодных отношений с развитыми капиталистическими странами.

Но, так или иначе, сложившийся интеграционный механизм должен выполнять в той или иной форме и „внешнюю” по отношению к социалистическому содружеству функцию, обеспечивая его включение в общемировые хозяйственные связи не как простой совокупности отдельно взятых стран, а как определенной экономической общности.

Как уже отмечалось, плановый механизм социалистической экономической интеграции органически включает в себя совокупность товарно-денежных инструментов, используемых в процессе взаимного сотрудничества.

Существенным аспектом совместной плановой деятельности является, например, органическое сочетание планирования натурально-вещественной и стоимостной сторон взаимного обмена товарами и услугами. Практика показывает, что решение таких проблем, как развитие системы многосторонних расчетов в переводных рублях, многостороннего долгосрочного кредита и т.п. зависит в конечном счете от состояния сотрудничества в области плановой деятельности, в первую очередь координации народнохозяйственных планов.

Как бы ни был совершен собственно плановый механизм в узком смысле этого понятия, он не будет целостным, если не распространится в полной мере на регулирование стоимостной стороны взаимного обмена, на формирование адекватных плановым методам международного хозяйствования товарно-денежных инструментов.

Представление, будто можно создать совершенный плановый механизм, оставляя в неприкосновенности используемые товарно-денежные инструменты, в лучшем случае иллюзорно. Усложнение мирового рынка, его расчленение на региональные, товарные рынки, разного рода рынки преференциальной торговли являются реальностью сегодняшней экономической практики. Эта реальность, существующая не на словах, а на деле. Она должна учитываться, видимо, и при совершенствовании экономического механизма социалистической интеграции.

Обслуживание взаимодействия народнохозяйственных комплексов на различных уровнях управления

Социалистическая экономическая интеграция по своей природе не может быть продуктом автоматизма экономических процессов, протекающих вне государственной организации хозяйственной жизни. Именно суверенные социалистические государства выступают в качестве „генеральных субъектов” экономической интеграции, выразителей и реализаторов наиболее существенных объединительных тенденций в экономике социалистического содружества.

В условиях взаимодействия суверенных социалистических государств их международное содружество представляет собой систему, основанную на существовании международного социалистического разделения труда между этими странами. Характер их народнохозяйственных комплексов проявляется в суверенном характере принимаемых в их рамках хозяйственных решений, в наличии у всех стран национальных систем планирования и управления народным хозяйством, балансов национального дохода и валового общественного продукта, кредитно-денежных систем и, в конечном счете, специфических национальных интересов.

Таким обрззом, первый (и наиболее важный, ключевой) уровень взаимодействия социалистических народнохозяйственных комплексов — это именно общегосударственный, сакроэкономический уровень. Развитие совместной плановой деятельности на этом уровне позволяет планомерно и сознательно формировать будущий облик социалистических народнохозяйственных комплексов — „единых фабрик”.

Социалистическая интеграция выступает как продукт согласованной экономической политики социалистических государств, направленной на постепенное формирование новой экономической общности — межгосударственного народнохозяйственного комплекса суверенных социалистических государств. Любое мероприятие взаимного сотрудничества само по себе далеко не обязательно имеет интеграционную окраску. Оно приобретает таковую тогда, когда подчинено общим целям и задачам интеграционного процесса. Кроме того, логическим следствием преувеличения роли отраслевого сотрудничества (сотрудничества на микроуровне вообще) является абсурдный вывод, что возможности участия той или иной страны в интеграционном процессе зависят от максимизации отраслевой структуры ее народного хозяйства (в противном случае ей начево будет делать в тех отраслях, которых у нее нет).*

Отсюда о таких явлениях, как интеграция отдельных элементов производственных аппаратов разных стран, можно говорить лишь с большой долей условности. В рамках процесса международной экономической интеграции они не имеют самодовлеющего значения, поскольку международная кооперация на микроэкономическом уровне (научно-производственные объединения, предприятия, звенья научно-технического комплекса) имеет подчиненное значение по отношению к плановому взаимодействию народнохозяйственных комплексов в целом.

Сделанная оговорка не означает, что интеграция может осуществляться как некая бесплотная идея. Она материализуется в первую очередь как раз в сфере производства, науки и техники. Но эта материализация носит строго упорядоченный планомерный характер. Без ясной стратегии усиления взаимодействия народнохозяйственных комплексов связи на микроэкономическом уровне не приведут самотеком к формированию оптимальной экономической структуры интегрированного международного комплекса.

Поэтому качественная оценка „интеграционное” заложена, по общему правилу, вне любого конкретного мероприятия, оно определяется его соответствием

*Еще менее удачны, на наш взгляд, встречающиеся порой в экономической литературе попытки сконструировать экономический механизм „отраслевой” интеграции. Вряд ли допустимо с принципиальных позиций ставить вопросы ценообразования, валютно-финансовых отношений и т. п. в узкоотраслевом аспекте. Любая цена на данный конкретный продукт, например, имеет реальный экономический смысл только в том случае, если она отражает соотношение стоимости этого продукта со стоимостями всех других продуктов, поступающих в экономический оборот. Поэтому „отраслевое” ценообразование — это процесс отнюдь не автономный.

общим направлениям согласованной экономической политики. Нельзя построить здание без строительных материалов, но само только наличие строительных материалов еще не означает, что здание построено. Рационализация международного социалистического разделения труда в условиях интеграции заключается не только в установлении новых производственных контактов, но и в отказе от тех из них, которые были обусловлены случайными или преходящими факторами. Такая рационализация не имеет ничего общего с „атомизацией” интеграционного процесса.

Взаимодействие социалистических государств в первую очередь на народнохозяйственном уровне обусловлено самой исторической логикой социалистического обобществления производства, поскольку это обобществление осуществляется первоначально в государственно-национальных рамках. Переход к взаимодействию на других уровнях хозяйствования становится необходимым и возможным только по мере усиления взаимодействия на народнохозяйственном уровне, по мере общего прогресса внутривнутрихозяйственного обобществления.

Ясно, что последовательная интернационализация экономической жизни социалистических государств не может быть обеспечена только лишь за счет контактов на государственном уровне. Однако и они открывают крупнейшие возможности для экономии общественного труда, ускорения темпов научно-технического прогресса за счет использования эффекта макроэкономической кооперации.

Речь здесь идет в первую очередь о реализации стратегии согласованного экономического роста, дающей возможность обеспечивать более полное использование резервов, скрытых в углублении отраслевого и территориального разделения труда, в частности, согласованное строительство и размещение новых производственных мощностей, развитие материальной инфраструктуры и т.п.

Второй уровень взаимодействия (который ради упрощения можно назвать отраслевым) представляет собой ту сферу, где наиболее интенсивно изменяется сама материальная база для формирования и упрочения общих (интернациональных) экономических интересов. Совместная реализация крупных проектов, растущее объединение производственных аппаратов на базе специализации и кооперации означают, что интернациональные интересы все чаще начинают проявляться в своей самой непосредственной форме: как коллективная заинтересованность в успехе общего конкретного дела. Это — принципиально новое явление в экономических отношениях социалистических стран.

В рамках этого уровня следует выделить взаимодействие отраслей и ведомств, а также взаимодействие хозяйственных организаций, непосредственное сотрудничество предприятий и объединений. В силу различных масштабов производственного аппарата различных стран-членов СЭВ между двумя рассматриваемыми „подуровнями” нельзя провести четкой грани. (Например, партнером отраслевого министерства в одной стране может выступать объединение предприятий или даже отдельное предприятие в другой).

Данный уровень (отраслевой и „микроэкономический” одновременно) дает возможность не только обеспечивать конкретизацию задач, сформулированных на уровне народного хозяйства в целом, их последовательное и детальное выполнение. Он имеет и самостоятельное значение, поскольку позволяет приводить в движение дополнительные резервы углубления международного социалистического разделения труда.

Здесь следует обратить внимание на следующее фундаментальное обстоятельство. Социалистический народнохозяйственный комплекс, если рассматривать его как единое целое, в принципе не может располагать относительно избыточными ресурсами, если отвлечься от их натурально-вещественной формы. Все ресурсы, которыми располагает народнохозяйственный комплекс, могут найти эффективное применение в его собственных границах на основе использования плановых методов социалистического хозяйствования.

Иным образом выглядит дело в тех случаях, когда мы рассматриваем ресурсы, выделяемые обществом на конкретные цели, на удовлетворение тех или иных потребностей. На том уровне та или иная доля национальных ресурсов уже может рассматриваться в качестве относительно избыточной, поскольку ее интернациональное применение дает больший эффект по сравнению с тем, который может быть получен в рамках данного народнохозяйственного комплекса.

Наконец, еще один специфический уровень взаимодействия народнохозяйственных комплексов связан с деятельностью разного рода организаций, выполняющих от имени стран-участниц непосредственное управление выделенными в их распоряжение ресурсами. Вполне понятно, что деятельность этих организаций (своего рода лабораторий интернационального хозяйствования) имеет во многих отношениях пионерный характер, поскольку в ряде из них осуществляется переход от косвенного использования национальных ресурсов в общих целях стран-участниц к непосредственному, прямому использованию. Не менее очевидно, однако, что результативность деятельности любых хозяйственных организаций, в свою очередь, самым непосредственным образом зависит от того, насколько эффективно осуществляется огласование экономической политики и использование практических средств ее реализации на двух рассмотренных выше уровнях взаимодействия социалистических народнохозяйственных комплексов.

Сочетание возможностей непосредственного объединения усилий интегрирующихся социалистических стран на базе совместной собственности и на основе технологического объединения их производственных аппаратов позволит все более заметно ускорять ход интеграционных процессов, дополнять преимущества планомерного сотрудничества национальных народнохозяйственных комплексов преимуществами непосредственной кооперации труда на уровне хозяйственных организаций.

Таким образом, по мере углубления международного социалистического разделения труда возделения труда возрастает не только степень общей взаимодополняемости национальных экономик. В различных отраслях и сферах эконо-

мической деятельности формируются устойчивые международные производственные, научно-технические и иные связи, являющиеся конкретным выражением процессов социалистической интеграции и интернационализации хозяйственной жизни в целом.

Такие связи, объектом которых может быть отраслевой или межотраслевой научно-производственный комплекс, осуществление научно-исследовательских проектно-конструкторских работ, транспорт, обслуживающий международные перевозки и т. п., нуждаются в тех или иных формах коллективного управления сотрудничающими странами. Тем самым они становятся объектами совместной экономической деятельности (или интернационального хозяйствования) социалистических государств.

Совместная экономическая деятельность как результат сотрудничества суверенных народнохозяйственных комплексов еще не означает ведения ими общего хозяйства как такового. Это межгосударственная деятельность на паритетных началах (например, на основе кооперационных соглашений, долевого участия и т. п.).

В своем наиболее развитом виде совместная экономическая деятельность означает формирование и развитие международных научно-производственных комплексов, основанных на долевым участии, „технологическом слиянии” или других формах устойчивых производственно-экономических связей. С этой точки зрения следует подчеркнуть значение долевого собственности. Если комплекс функционирует на ее основе, то это означает фактически удвоение (а, следовательно, повышение надежности) планомерной связи партнеров. К общей (вытекающей из характера социалистических межгосударственных отношений) планомерной связи добавляется связь, имеющая конкретную экономическую базу в виде совместной (долевой) собственности.

„Микроэкономический” уровень интернационального взаимодействия предъявляет особо строгие требования к экономическому механизму. В деятельности, скажем, совместного предприятия или международной организации фокусируются по существу все проблемы международного сотрудничества. Кроме того, к ним добавляются проблемы взаимодействия национальных хозяйственных систем, а также взаимоотношений между отдельными элементами этих систем. На эти проблемы обращает, в частности, внимание П. Божик.

Он отмечает, что при формировании совместных предприятий возникают прежде всего «затруднения при расчетах со странами-учредителями. С одной стороны, в качестве основы расчетов принимается международная валюта (перводной рубль) и международные цены стран-членов СЭВ, а с другой — величина первоначального капитала каждой стороны в образовании основных и оборотных производственных фондов совместного предприятия увязывается с долей в доходах этого предприятия. Однако такое решение не устраняет трудностей, вытекающих из пересчета национальных валют на международную. Доля отдельных стран в создании основных производственных фондов должна быть рассчитана в

международной валюте стран-членов СЭВ. Но не для всех составных частей этих фондов есть международные цены, не все они являются предметом международного обмена.

Аналогичные трудности возникают в процессе функционирования совместных предприятий» [6].

Общей тенденцией развития механизма социалистической экономической интеграции является приспособление его инструментов для эффективного обслуживания интеграционных процессов, осуществляющихся на всех уровнях взаимодействия народнохозяйственных комплексов стран социализма.

Между системами управления социалистическим интеграционным процессом на всех уровнях (народное хозяйство, отрасли и хозяйственные организации, международные научно-производственные комплексы и организации), естественно, нет какого-либо водораздела. Их сочетание и обеспечивает в совокупности глубокое и всестороннее взаимодействие народнохозяйственных комплексов стран-членов СЭВ во всех сферах экономической и научно-технической деятельности.

Соотношение форм сотрудничества на многосторонней и двусторонней основах

Социалистическая интеграция как процесс многосторонний по своей сути существенно изменяет соотношение между формами сотрудничества на двусторонней и многосторонней основах в пользу последних. Однако обе эти формы связей никоим образом нельзя рассматривать как противоположные или взаимоисключающие, поскольку они взаимодополняют и взаимообогащают друг друга. Интенсивность и глубина многостороннего сотрудничества определяются в большой мере состоянием двусторонних связей. В свою очередь, последние приобретают более явно выраженный интеграционный характер в условиях развития многосторонних отношений. Многостороннее сотрудничество выступает в качестве одного из главных направлений и вместе с тем существенного признака развития интеграционного процесса.

Во-первых, в современных условиях само развитие производительных сил ставит объективные пределы возможностям двусторонних экономических решений. Это относится как к научно-технической и производственной сферам, так и к таким проблемам, как развитие транспорта и связи, экология, рациональная концентрация финансовых ресурсов на определенных направлениях, обеспечение достаточно емких рынков сбыта и т.п.

Во-вторых, интенсивные внешнеэкономические связи дают возможность широко использовать варианты, альтернативные внутрихозяйственным решениям. Вряд ли нужно доказывать, что возможность выбора наиболее эффективного варианта внешнеэкономических связей на многосторонней основе по общему правилу неизбежно оказывается большей, чем в случае двустороннего сотрудни-

чества. То же самое можно сказать и об обеспечении эффективной сбалансированности народнохозяйственных комплексов, которая может быть легче достигнута при подходе к этой проблеме как к проблеме многостороннего сотрудничества.

В-третьих, система двусторонних связей, какой бы совершенной она ни была, не в состоянии обеспечить эффективное согласование ряда существенных аспектов внешнеэкономической политики социалистического содружества, в том числе антидискриминационной политики по отношению к третьим странам и их группировкам.*

В-четвертых, весь комплекс проблем экономического механизма должен решаться на единой принципиальной основе, поскольку в противном случае неизбежно возникает множественность „двусторонних” механизмов, хотя это и не исключает опережающих решений по отдельным элементам механизма первоначально на двусторонней основе.

Таким образом, двусторонность („билатеральность”) хозяйственных связей отнюдь не имманентна системе международных экономических отношений стран социализма в особенности в условиях развития социалистического интеграционного процесса. С принципиальной точки зрения именно многосторонний механизм сотрудничества представляется единственно адекватным средством реализации ее перспективных целей.

Конечно, приведенное положение не следует абсолютизировать. Повышение роли многостороннего сотрудничества отнюдь не означает вытеснения им двусторонних связей. Более того, в обозримой перспективе многостороннее сотрудничество во многих сферах будет оставаться своеобразной „надстройкой” над двусторонним. Лишь по мере дальнейшего углубления социалистического интеграционного процесса будут постепенно расширяться те области экономической деятельности, где институционные формы многосторонних связей обеспечивают их относительно самостоятельное развитие (международные программы, совместные предприятия, объединения, финансовые учреждения, научно-исследовательские организации). В условиях взаимодействия суверенных государственно организованных народнохозяйственных комплексов двусторонние связи логически и исторически можно рассматривать как исходные взаимосвязи. В конечном счете

*Фактически уже на современном этапе двусторонние отношения между социалистическими и капиталистическими странами несут на себе отчетливо выраженный отпечаток многосторонних отношений. В качестве иллюстрации этого положения можно привести высказывание польского экономиста С. Михаловского, отмечающего в своей статье „Торговля ГДР—ФРГ и Европейское экономическое сообщество”, что экономические отношения между двумя этими странами не имеют исключительно двустороннего характера. „Имея в виду существенную степень интегрированности обоих партнеров с экономическими группировками: ГДР и СЭВ и ФРГ и ЕЭС, они должны рассматриваться на более широкой платформе многосторонних экономических связей” [7]. Это положение применимо, на наш взгляд, и к системе двусторонних связей стран СЭВ с капиталистическими государствами в целом.

любое многостороннее решение, любая многосторонняя программа могут быть реализованы на практике через совокупность двусторонних связей.

Из сказанного можно сделать вывод, что двусторонние связи длительное время будут оставаться существенным элементом того реального механизма, с помощью которого осуществляются многосторонние связи. Так, чтобы согласованный план многосторонних интеграционных мероприятий был реализован, необходимо воплотить его задания в задания национальных планов и в систему конкретных соглашений и взаимных обязательств, включая обязательства по взаимным поставкам, платежам и т. п.

Кроме того, многосторонние программы во многих областях становятся возможными только при определенной интенсивности двусторонних связей. Это относится, в частности, к программам рационализации взаимосвязей по научно-техническому сотрудничеству, специализации и кооперации производства. При слабой интенсивности взаимных двусторонних связей по этим направлениям нередко отсутствует сам объект многостороннего сотрудничества. Успех тех или иных двусторонних мероприятий зачастую обуславливает выход сотрудничества за двусторонние рамки путем присоединения к участию в нем других стран.

Взаимосвязь многосторонних и двусторонних отношений в процессе интеграции проявляется также в „замещении” двусторонними решениями тех пробелов в экономическом механизме, которые связаны с отсутствием эффективных инструментов, обслуживающих многостороннее сотрудничество. Хорошо известная необходимость решать множество общих для всех стран СЭВ вопросов в двустороннем порядке обусловлена нерешенностью, например, таких вопросов, как многосторонние расчеты, разработка сквозных балансов производства и потребления некоторых важных видов промышленной продукции и т. п. Когда реально существующий механизм интеграции блокирует или ограничивает возможность многостороннего решения, двусторонние отношения позволяют в какой-то мере обойти это препятствие. Вместе с тем в таких условиях особенно четко проявляется необходимость коллективного подхода к проблемам, которые могут эффективно решаться лишь на многостороннем уровне. Таким образом, само существование системы тождественных или аналогичных проблем в той или иной области двусторонних отношений свидетельствует, что она созрела для многостороннего регулирования всеми заинтересованными странами.

Анализ соотношения многостороннего и двустороннего уровней взаимного сотрудничества был бы неполон, если не включить в него вопрос об относительно самостоятельной роли последнего. Эта относительно самостоятельная роль двустороннего сотрудничества, помимо упоминавшегося уже характера социалистического интеграционного процесса, предполагающего *непосредственное* взаимодействие между государственно организованными народнохозяйственными комплексами, а, следовательно, ставящего определенные рамки взаимоотношениям типа „страна — международный центр — страна”, определяется рядом других факторов.

В их числе следует назвать прежде всего факторы, лежащие в сфере производства или объективизированные теми или иными материальными, а также природно-географическими условиями. К ним относятся, в частности, производственные и научно-технические задачи, представляющие специфический интерес для двух стран (например, в силу того обстоятельства, что данный вид экономической деятельности получил развитие только в двух этих странах); производственные и научно-технические задачи, для решения которых достаточно объединить усилия двух стран; проблемы, вытекающие из потребностей организации эффективного сотрудничества в приграничных районах, в деле совместного использования рекреационных ресурсов; некоторые проблемы материальной инфраструктуры.

Наконец, в ряде случаев двустороннее сотрудничество фактически выступает как разновидность многостороннего. Это характерно для тех случаев, когда ряд стран согласовывают с одной и той же страной способы и условия решения данной конкретной экономической задачи (в силу наличия у нее определенных производственных мощностей, запасов естественных ресурсов, научно-технических решений и т. д.). В таких случаях эта страна берет на практических роль организатора многостороннего сотрудничества.

Как показывает практика, по отдельным видам товаров и услуг функции „замыкающего”, балансирующего партнера выполняют разные страны, являющиеся их основными производителями или потребителями. Следовательно, происходит своеобразное разделение этой функции, которое ощущается тем заметнее, чем глубже заходит процесс международной специализации производства. Здесь, конечно, не может быть достигнута полная равномерность. Однако дело не в количественных долях, определяющих степень участия той или иной страны, а в коллективном характере ее осуществления социалистическими странами.

В этом обстоятельстве проявляется наиболее отчетливо взаимное переплетение двух- и многосторонних форм сотрудничества. При соответствующем решении проблем интеграционного механизма какой-либо принципиальный водораздел между ними, видимо, исчезнет, поскольку выбор той или иной формы будет осуществляться исключительно по соображениям, продиктованным конкретными объектами сотрудничества.

Следует отметить также еще одну важную функцию двустороннего сотрудничества — функцию объекта экономического эксперимента. При наличии благоприятных политических и экономических предпосылок двустороннее сотрудничество может стать (и становится на практике) сферой внедрения новых решений, их экспериментальной проверки. В последующем эти новые решения (если они не обусловлены устойчивой спецификой двусторонних отношений данных стран) могут быть распространены и на все социалистическое содружество.

Развитие форм долгосрочного регулирования социалистического интеграционного процесса

Любая новая, более высокая ступень социалистической интеграции означает в то же время дальнейшую ступень в развитии механизма международного сотрудничества. Это, как уже отмечалось выше, плановый по своей сути экономический механизм, представляющий собой естественный результат развития социалистических производственных отношений, преимущества которых используются коммунистическими и рабочими партиями стран-членов СЭВ и в международных рамках.

Одна из основных теоретических и практических проблем, вытекающих из анализов перспектив социалистического интеграционного процесса, заключается в разработке форм и методов его эффективного долгосрочного регулирования. Вполне понятно, что такое регулирование не может осуществляться по аналогии с планированием на долгосрочную перспективу в отдельных странах. В обозримом будущем, как и на современном этапе, основой такого регулирования будет использование различных форм совместной плановой деятельности. Другое дело, что сами эти формы не останутся неизменными. Они будут, как показывает практика, постоянно совершенствоваться.

Долгосрочное регулирование интеграционного процесса предполагает решение комплекса проблем, которые можно объединить в две крупные группы. К первой относятся вопросы, связанные с уточнением задач и взаимного сотрудничества, с его программированием. Поскольку временной горизонт Комплексной программы охватывает два десятилетия, в ней не могли быть зафиксированы чрезмерно детализированные конкретные задания, рассчитанные на реализацию, скажем, в 1985 или 1990 гг. Такая детализация осуществляется в каждом новом пятилетии при определении очередных задач взаимного сотрудничества.

Понятно, что представления о перспективах развития социалистического интеграционного процесса, о наиболее важных его „точках роста” останутся абстракциями, если не будут определены реальные пути дальнейшего углубления планового взаимодействия народнохозяйственных комплексов стран социалистического содружества. Здесь мы сталкиваемся со второй группой проблем долгосрочного регулирования интеграционного процесса — с проблемами совершенствования форм и методов совместной экономической деятельности, рассчитанных на перспективу.

Любые формы усиления планового взаимодействия народнохозяйственных комплексов стран представляют собой в то же время определенные конкретные формы интернационального общественного производства социалистического производства. (Естественно, форму этого процесса нельзя отождествлять с ним самим как с процессом, осуществляющимся в сфере материального производства).

Координация пятилетних народнохозяйственных планов, например, независимо от основы, на которой она осуществляется (двусторонняя и многосто-

ронная), уже не может рассматриваться как простое сложение плановой деятельности двух или ряда социалистических государств. Она включает в себе некоторые черты коллективной межгосударственной деятельности, поскольку нацелена в конечном счете на согласованное использование существенной доли экономического потенциала ряда стран.

Но координация планов и ее производственный субстрат — специализация производства, выражающаяся в специализации поставок, не могут быть исчерпывающими, пригодными для решения любых производственных и научно-технических задач формами и способами совместной экономической деятельности. Они нуждаются, очевидно, в дополнении другими, более комплексными по своему характеру формами планового взаимодействия народных хозяйств.

Такие формы, определенные Комплексной программой социалистической интеграции, подучают все большее развитие на практике. С точки зрения реализации метода совместной плановой деятельности все многообразие этих форм можно свести, на наш взгляд, к совместному планированию отдельных межотраслевых комплексов, отраслей и производств.

Производственная и научно-техническая кооперация представляет собой материальную основу совместного планирования, с одной стороны, а, с другой, что вытекает из ее сути, — основной метод практической реализации совместно сформулированных плановых целей. В таком своем качестве она и представляет собой, видимо, наиболее комплексную форму совместной экономической деятельности социалистических стран.

Здесь речь идет в первую очередь о таких кооперационных контактах, которые заключают в себе момент воспроизводства взаимоотношений между партнерами, т. е. придают процессу интернационального обобществления производства относительно устойчивый характер, т. е. в конечном счете о кооперации, ведущей к фактическому объединению определенных элементов производственных аппаратов ряда стран.

Использование метода совместного планирования на межотраслевом или отраслевом уровнях предполагает соответствующий масштаб кооперационных связей. Крупномасштабная международная кооперация имеет своим следствием не только увеличение массы эффекта, достигаемого сложением усилий партнеров. Она, что не менее важно, открывает качественно новые возможности для оптимизации всей системы взаимных связей.

Поскольку здесь мы имеем дело именно с международной кооперацией, в качестве ее обязательного условия выступает получение ощутимой экономической выгоды для каждого партнера. Следовательно, каждое отдельное мероприятие должно иметь взаимовыгодный характер, что исключает по общему правилу возможность „сальдирования” результатов неэффективных и эффективных для каждой данной страны кооперационных контактов.* Крупномасштабная коопера-

* Даже в том случае, если при таком „сальдировании” конечный эффект кооперационных связей окажется для данной страны достаточно крупным, у нее возникнут большие

ция позволяет преодолевать ограничения, связанные с заключением частных соглашений, поскольку на ее основе проблема эффективности отдельных „элементарных“ актов взаимного разделения труда утрачивает свое самостоятельное значение. В этом случае каждый партнер заинтересован в итоговом значении всего их „пакета“.

В качестве весьма существенного параметра крупномасштабной кооперации выступает ее временной горизонт. Такие вопросы, как техническое перевооружение отраслей промышленности, создание новых производств, реализация согласованных программ капитального строительства могут последовательно решаться с учетом длительной перспективы. Развитие форм совместной плановой деятельности, рассчитанных на решение перспективных задач, создает поэтому качественно новые возможности для практической реализации преимуществ крупномасштабной кооперации экономик стран СЭВ.

Именно в этом контексте можно рассматривать, на наш взгляд, значение комплексных целевых программ сотрудничества в деле дальнейшей рационализации всей системы взаимного разделения труда. „Их цель, — сказал Л. И. Брежнев на XXV съезде КПСС, — общими усилиями обеспечить быстро растущие потребности в энергии, топливе, основных видах сырья, полнее удовлетворить спрос на продовольствие и промышленные товары народного потребления, поднять уровень машиностроения, ускорить развитие транспорта. Это наши очередные общие задачи [8] .

Конечно, долгосрочная целевая программа сотрудничества при любой возможной на современном этапе глубине и детализации ее разработки, видимо, еще не сможет быть оформлена в качестве межотраслевого кооперационного соглашения со всеми присущими такого рода соглашениям атрибутами. Кооперационные соглашения выступают, вероятно, в качестве одной из наиболее действенных форм оформления и реализации подпрограмм (например, в области развития новых источников энергии, модернизации машиностроительных производств и т. п.). Даже при этом условии международная кооперация получит качественно иной масштаб. Кроме того, долгосрочная целевая программа может превратиться в конечном счете в своего рода „генеральное соглашение“ по кооперации производства и научно-технической деятельности на народнохозяйственном уровне.

Разработка долгосрочных целевых программ означает дальнейшее развитие и конкретизацию положений Комплексной программы социалистической экономической интеграции о координации народнохозяйственных планов на длительную перспективу. Вместе с тем она выражает все более настоятельно проявляющуюся необходимость подчинить взаимное сотрудничество стран-членов СЭВ решению наиболее важных проблем их социально-экономического прогресса.

сложности, связанные с необходимостью выравнивания условий хозяйствования для отдельных хозяйственных организаций, участвующих в кооперации.

Основной смысл долгосрочной программы сотрудничества, как одной из разновидностей программно-целевого планирования при социализме, состоит в определении согласованных путей решения тех или иных общих для братских стран проблем, в оценке объема связанных с этими решениями затрат и ожидаемого эффекта, а также в установлении источников ресурсного обеспечения, наконец, в разработке системы организационных мероприятий, обеспечивающих их разработку и реализацию.

Непременным условием успешной разработки и последующей реализации долгосрочных целевых программ сотрудничества „должна быть готовность участвующих стран использовать свои природные богатства, материальные, трудовые и финансовые ресурсы в национальных и общих интересах, а также готовность стран к согласованным действиям при таком сотрудничестве. Составление программ быть основано на глубоком анализе наиболее рациональных и практически осуществимых направлениях и темпах развития национальных экономик стран-членов МЭВ, в увязке с имеющимися ресурсами и учетом целесообразных изменений в структуре народного хозяйства этих стран. Важное значение будет иметь также органическая связь поставленных целей и задач с достижениями научно-технического прогресса, использованием новейших достижений техники, технологии и организации производства в различных отраслях промышленности” (9).

Усиление межотраслевого, проблемного аспекта совместной плановой деятельности потребует, видимо, существенного усовершенствования существующего механизма взаимного сотрудничества, в частности, в направлении его ориентации на решение вопросов межотраслевого характера.

Но дело не сводится только к совершенствованию экономического механизма. Долгосрочный подход к решению ключевых задач взаимного сотрудничества на современном этапе делает необходимым уточнение научных представлений о перспективах выравнивания уровней экономического развития, о критериях оптимизации народнохозяйственных структур с учетом новых тенденций в развитии взаимного разделения труда, общемирового разделения труда в целом. Специального исследования заслуживает проблема участия в мероприятиях долгосрочных программ других социалистических государств, а также стран, развивающих сотрудничество с Советом Экономической Взаимопомощи. Речь идет, таким образом, о новом широком фронте экономических исследований, нацеленных на разработку комплекса проблем, связанных с долгосрочным регулированием социалистического интеграционного процесса.

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ON THE NATURE AND FUNCTIONS OF THE ECONOMIC MECHANISM
OF SOCIALIST INTEGRATION

YU. S. SHIRYAYEV

The article analyses the topical problems emerging in our days in the context of the development of the economic mechanism of socialist integration.

The author takes a stand for a unified concept of the planning mechanism, according to which planning and the commodity and monetary relations must constitute an organic whole. He continues by analyzing the similar and the divergent features of the international and the national (domestic) economic mechanisms. He advocates that the management methods applied in the particular countries should be expediently approximated to each other. In the course of this an interrelated system of normatives has to be created which would bring into a uniform accounting framework the economic units participating in domestic and external economic activities, and would create a direct relationship between monetary movements and the internal movements of assets.

Next, the author proposes a transformation of the commodity and monetary relations that would allow to transact the planned turnover with economic means in the most efficient structure. He emphasizes that a close connection is important between the planning of the exchange of commodities and services in physical terms and that in value terms.

The harmonizing activity aimed at international socialist economic cooperation and going on at three levels (macrolevel, sectoral and enterprise level) is surveyed. Finally the role of bilateral and multilateral forms of cooperation are analyzed, emphasizing that the process of integration definitely demands a growing weight of the multilateral forms.

I. SCHWEITZER

SOME PARTICULARITIES OF HUNGARIAN MACHINE IMPORTS FROM THE SOVIET UNION

The author examines the possibilities of further widening of machine imports on the basis of analyzing the experience of Hungarian machine imports from the Soviet Union.

The volume of Hungary's machine imports from the Soviet Union is increasing very rapidly. Its growth was almost 15-fold between 1958 and 1974. During the same period the increase of national income was 3.4-fold, that of accumulation 3.3-fold, of total exports 6-fold and of total imports 7.2-fold, respectively. This means that the Hungarian national economy is more and more closely linked to the Soviet economy also through the investment goods imported.

The growing importance of machine imports from the Soviet Union is indicated also by the fact that Soviet machines served as the basis of development in the solution of certain economic tasks in Hungary. Some relevant examples (since 1958) are: supply of agriculture with basic machines; replacement of the stock of vehicles in road, railway and air transport; acceleration of the construction of flats and roads; considerable easing of traffic problems in Budapest through the construction of the underground railway (Metro). Soviet equipments were given an important part in major central development projects of several industries, too (metallurgy, textile and chemical industries).

Soviet economic leadership, too, is paying great attention to the development of trade in machinery with CMEA-countries and during the last ten years it has also strongly striven for the increase of its machine exports. The Soviet Union wishes to shape its export structure in the long run in a way to correspond to the level of its economic development, i.e. the proportion of processed goods – mainly that of machines and equipment – is to be increased. Hungary may reckon with powerful drive for machine exports on the part of the Soviet Union also in the future, and the more so because the Soviet Union wishes to reduce the growth rate of raw material exports without any decrease in the growth rate of total foreign trade turnover. How can machine imports from the Soviet Union be further increased most advantageously from the viewpoint of the development of the Hungarian national economy and what are the barriers to this increase? To give a proper answer the competitiveness of Soviet machines, the reconcilability of the structures of demand and supply as well as the organizational frameworks of trade relations had to be analyzed.

Factors determining the competitiveness of machines

The attention of buyers of machines and equipments extends to several points when considering a purchase. The degree to which machines can be utilized is influenced by several specific factors. Technical parameters determine efficiency and productivity. However, the same importance should be attributed to proper adaptation to utilization purposes, to reliability, exact information on the characteristics and structure of the machine, easy service, reliable supply with spare parts, etc. When buying a machine it is also of great importance how elastically the seller adapts itself to the demands of consumers both in time (quick and exact delivery) and in fulfilling specific requirements.

These factors are generally even more important than the price when the buyer makes a choice, i.e. when he determines the competitiveness of a machine. Let us speak, therefore, about these factors first.

Technical standards

Soviet machines and equipments or complete factories put into operation in Hungary rarely cause any disappointment; they correspond to the technical parameters indicated, they attain and often even exceed the promised output.

In the Soviet Union the prescribed parameters and efficiency of machines and equipments to be exported are strictly checked. In order to avoid claims from abroad because of quality everything is done even at the expense of prolongation of testing time or several changes in design.

It occurs that technical parameters of Soviet machines and equipments and their cost norms of production are less favourable than those of the most up-to-date Western ones. This is known already before the purchase and necessitates compromises on the part of consumers. The necessity of a compromise is fully rational. It would not be a realistic objective to strive for a leap in economic development and try to introduce the most up-to-date technology available in the world in all fields of the national economy to be developed. The target should be put lower than that: there are several cases where development of a follow-up character should be regarded as sufficient and the meeting of domestic demand for machines at an acceptable, although not the highest level as satisfactory.

One of the greatest problems in the development of Soviet production is — as indicated also in the report of the Central Committee submitted to the XXVth Congress of the C.P.S.U. — that it is not always geared to the requirements of the consumer. Planned control of technological progress and stimulation for the replacement of the assortment of goods have led to the appearance of new machines — though sometimes claimed to be new following only some insignificant alteration — as well as to the improvement of technical parameters and economic efficiency indicators. However, results were not satisfactory with regard to the range of choice, the increase in the proportion of special machines and the elastic realization of alterations aimed at

adaptation to consumer requirements. In general, the special requirements of consumers are enforced only in those particular cases when the central organs themselves exercise pressure on producers to take them into consideration.

The quality of Soviet machines — just as that of the machines of other socialist countries — is influenced also by a factor which cannot be eliminated even by the best system of technical-qualitative prescriptions, categorizations and control, namely, the lack of balance necessarily resulting from the speed and strong concentration of industrial development. The entire industrial background, the quality of processed materials and of machines producing machines, the experience of engineers as well as of skilled and auxiliary workers, basically influence the utilizability of new machines, and first of all their reliability, not the technical parameters. (In this field deficiencies can often be met also with Hungarian machines of new design manufactured only for a short time yet.) Practice and accumulated manufacturing experience are indispensable for turning out faultless machines.

Supply with spare parts, service

In connection with the running of the Hungarian machine park it is a very important question what happens if an imported Soviet machine breaks down. The consumer servicing activity of socialist countries is, in general, not satisfactory (servicing, supply with spare parts, etc.). There are CMEA-decisions providing for the establishment of consumer servicing bases, but this process is hardly advancing in practice.

Let us speak about the spare parts problem first. In the Soviet Union there is a special big enterprise controlled by computers and possessing a network of stores, called Zapchastexport, dealing with foreign trade in component parts of vehicles, building and agricultural machines independently of the foreign trade in finished machines. The orders of partners from socialist countries are collected by the enterprise at the beginning of the year preceding the year in question and met to the extent of available possibilities. This means, in general, a partial confirmation of the volume of spare parts ordered.

Hungarian problems are aggravated also by the fact, that in comparison with other countries, the proportion of component parts in the machinery exports of the Soviet Union to Hungary is especially low relative to that of finished machines.

To illustrate this I summarized shipments of spare parts delivered in greatest volume between 1970 and 1974 in order to eliminate yearly fluctuations, and then I computed the relative proportions.*

Regarding total Soviet exports the proportion of tractor spare parts amounted to 86.1 per cent relative to tractors, while only to 46.6 in the exports to Hungary. In case of agricultural machines (mostly combine-harvesters) the ratio of spare parts to finished machines was 37.5 per cent within the total Soviet exports, while only 19.8 per cent in

* Source of basic data: *Внешняя торговля СССР* (Soviet statistical yearbook), 1970–1974 editions.

the exports to Hungary. The corresponding ratios for cars were 31.6 and 20.3 per cent. A favourable situation – at least with regard to quantity – could be observed only with lorries: here the total of spare parts received during five years amounted to 88 per cent of lorries in case of deliveries to Hungary, while the same ratio within total Soviet exports was 64.9 per cent. (In 1972 and 1973 the import of lorry spare parts from the Soviet Union even exceeded that of finished machines, namely, by 48.0 and 8.6 per cent, respectively.)

In my opinion, the fundamental reason for the spare problem is that planning in the socialist countries is concentrated on the production of finished machines whose quantity can be determined easily. These plan targets are themselves very stepped-up. Their fulfilment or overfulfilment means unambiguous success, while the contrary amounts to unambiguous failure. Therefore, the efforts of producers are necessarily aimed at the fulfilment of these targets and the production of spares is degraded to a secondary task.

Thus, the spare problem has been solved in a curious, but not irrational way: repair workshops and later on also machine factories in Hungary started specialized manufacturing of spare parts for Soviet tractors and agricultural machines. Such manufacturing is going on also in other CMEA-countries and in some cases even foreign trade transactions take place in these goods.

A problem of another nature influencing the development of machine imports from the Soviet Union, at least to the same extent, is repair and replacement in case of failure of components or units of complete factory equipments. In such cases the production loss may cause immeasurable damage and, therefore, the importance of prompt repair is overwhelming. In this field we have had recently several favourable experiences. The competition raised by Western firms for the Soviet Union is keen in this respect. These firms follow their machines with attention after delivery, too, they provide continuous servicing according to agreements and pay special attention that in case of a default the necessary components or units should be delivered within the shortest time possible and, if necessary, they even do the fitting themselves.

Price level, motivation of importers

Up to recent times, the Soviet Union has set its export prices under the influence of its domestic producer prices. In many cases this contributed to the competitiveness of Soviet machines and equipment on foreign markets to a great extent and was advantageous for the buyers.

In Soviet domestic price formation the prices of machines are established from the viewpoint of stimulation for technological progress. In this sense the price level in the machine-building industry was further reduced on January 1, 1973. At that time the decrease of wholesale prices amounted to 12 per cent in the average of the machine-building industry; prices of computing equipment were reduced by 29 per cent, those of metal cutting machines and rolling equipment by 11 per cent, of casting machines by 12 per cent, of electrotechnical equipment by 18 per cent, respectively. The previously applied

system of "graduated prices" was extended to a wider field. In this system prices are gradually reduced with increasing output, helping mass-production and diminishing costs of the given product.

In Soviet domestic price formation the incomplete consideration of cost elements can be observed in a cumulated form beginning with raw material production, through metallurgy to the manufacturing of machines and equipment.

The system of price agreements in the trade between CMEA-countries has changed since 1974 and after having departed from the system of prices fixed every five years the situation has essentially changed also with regard to machine prices. The nature, extent and effect of this change cannot yet be properly judged at present. Everything seems to indicate that in the formation of new export prices also the Soviet Union moves towards a more consistent consideration of the world market price level and the low level of domestic prices of machines will be more definitely separated from the formation of export prices. This will lead to a rise in the price level of machine imports from the Soviet Union.

Difficulties in planning the trade in machinery

Trade within the CMEA is going on on the basis of quotas fixed by long-term agreements. These quotas are the plan targets of foreign trade turnover and great efforts are made to fulfil (or even overfulfil) them. The system of placing orders and of quotas require, in general, such foresight for many years ahead, in a breakdown by products, which is not possible with every kind of product. When determining the quotas of long-term agreements a foresight of at least eight years would be required. Machine demands should be assessed for eight years ahead in sufficient detail for being able to take a stand at negotiations on plan coordination concerning demands for machine imports in the coming five-year plan period.

In the Hungarian economic mechanism the central organs do not break down the estimates of import machines to enterprises — nor do they summarize such on the basis of reported enterprise demands. The demand on the part of the enterprises, controlled by central measures and regulators, is given a greater scope.

A detailed estimation of the long-term demand for machines of users would mean that their demands received separately should be "summarized" in the interest of coordinating long-term plans and trade agreements. But this could hardly be realized satisfactorily in practice.

The present system is not free from problems either. In Hungary the basic organ for coordinating the trade in machines is at present the Ministry of Metallurgy and Engineering, which is familiar first of all with domestic machine manufacturing and the possibilities for export.

The interests of the machine-building enterprises in Soviet exports are usually strong and the Ministry strives to determine the quotas accordingly. Because of the close connection between exports and imports in bilateral relations the target figures influence, of course, also those of imports.

No satisfactory method has been found as yet for the determination of import target figures. They cannot be approached by guessing the demands for various kinds of machines. The central organs were unable to solve the problem satisfactorily even under the system of plan-instructions. Determination of long-term quotas was done perhaps faster previously — before the Hungarian economic reform of 1968 — though with regard to their fulfilment the situation has not worsened but rather improved since then.

The possibilities of an eight years' foresight in planning are naturally varying by major commodity groups within the entire machine import. Taking practical experience into consideration demands for the machine imports can be categorized under fairly well definable groups according to the possibility of their long-term planning.

1. The import needs of major investment projects to be realized on the basis of central (government) decisions can be relatively well planned in advance, though delivery dates cannot always be given precisely. Because of uncoordinated organization and sketchy planning shifts in time may be reckoned with and they may cause disturbances in the strict system of imports. From this point of view major projects carried out with a foreign "direct contractor", i.e. complete factories bought from a single partner are less problematic. On the other hand, from the technical point of view, the "assembly" of equipments imported from different places may give better results sometimes, thus making worthwhile to choose the more difficult way.

2. From the viewpoint of the possibility of planning machine demands expressed in the machine purchases of some public or mass transportation enterprises (without any need for major buildings) cause relatively reconcilable difficulties, since these investments are financed by the state from central resources earmarked for steady development (railway, air transport, urban mass transportation, postal services, etc.). Here import needs can be relatively well planned centrally, in harmony with replacement times and the introduction into foreign trade of new designs already tested in the Soviet Union.

3. Machines used in a wide sphere of enterprises and to be bought in large, homogeneous items cause more problems. Most characteristic examples are: trucks, tractors, combine-harvesters, agricultural machines, building machines, standard types of machine-tools, etc. In these fields the regulation of demands and the planning of needs in the long run cause greater difficulties mainly because the decisions of several consumers should be foreseen and influenced. The situation is aggravated — and even some hitches are caused at the beginning — by the fact that the economic leadership does not possess either adequate experience, or a satisfactory information system or a proper decision-making organization for influencing demands.

4. Long-term planning is most complicated with the group of machinery products where diversified requirements of many purchasers are to be met by a wide range of products. In precision engineering and telecommunication techniques, even in the most important kinds of goods we have nomenclatures ranging into hundreds of items. Quotas in physical units of measurement may refer here only to some major products (e.g. computers). A great part of products satisfies special demand for a small number of pieces (also a part of machine-tools, as well as productive and component parts, elements, etc.

should be ranked here). Scattered needs for individual or special machines and component parts are usually connected with shorter periods, they require more elastic reaction and cannot be linked with the eight-year term of five-year trade agreements mentioned (what is more, sometimes even the one-and-a-half or two-year terms of the annual agreements are too long). In many cases even the replacement time of products is within the time horizon of the trade agreements. In such cases requirements submitted for the coordination of five-year plans and then for trade agreements — determined in the form of value quotas — have no real content, and, therefore, the most considerable underfulfilment can be observed, in general, in this field.

A solution would be a differentiated elimination of the rigidity of five-year plan periods in the system of plan coordination and trade agreements, in accordance with the possibility of long-term forecasts and the importance of commercial transactions. It must be mentioned that practice will inevitably transform in this direction, since in groups of products that can be fitted least into the five-year system of foresight (e.g. instruments) the value quotas become more and more formal — as has already been indicated. The consequence of this fact should be drawn and the quota system could be completely disregarded with these products. Development of foreign trade in these products could be entrusted to the mutual interests of and direct agreements between the producer and consumer enterprises, with far-reaching promotion and support on the part of the state.

Let us try to tabulate the groups to be formed and already mentioned as follows:

Table 1
Machine imports by sphere of users

Utilization	Nature of production	Characteristic examples*
1. Narrow sphere of users (major governmental projects)	Individual products of high value	Complete equipments of factories
2. Narrow sphere of users (Some monopolistic enterprises)	Concentrated standard production of high value	Wagons, aeroplanes, ships, etc.
3. Wide sphere of users (many enterprises)	Mass production in great series	Trucks, tractors, harvesters, other agricultural machines, standard types of machine-tools, etc.
4. Wide sphere of users (many enterprises)	Deconcentrated production in wide assortments specified according to consumers' requirements	Instruments, telecommunication products, component parts, units, elements, etc.

*Commodity groups must not be rigidly assigned to particularities referring to the sphere of users and production. Mass production in great series is going on also in the precision engineering industry, and for instance, it may occur even in the production of agricultural small machines (even in tractor production) that specified individual requirements of consumers must be met.

In trade relations the system of long-term agreements and preliminary planning (quota system) may well function in the first two cases (unless some serious mistakes are committed by the centre). Possibilities are not so good in the third case: the main precondition is here to organize well the collection of needs from a wide sphere of users and influence their demand in a coordinated way. In the fourth case the present practice of fixing the turnover for the long-term may be regarded rather as an obstacle.

Flow of information

The increase of Hungarian machine imports from the Soviet Union may be impeded by the insufficient flow of information and the insufficient flexibility of foreign trade organization both in the field of information and commodity promotion as well as in entering into and realizing transactions.

When examining these problems the starting point should be that, regarding a longer time horizon, orientation towards imports of Soviet machines is a new thing for Hungarian enterprises. Hungarian technical culture is traditionally west-oriented (licences, technologies based on Western equipments, information, etc.).

Engineers designing the technical documentation of investments are usually familiar with Western technologies including also new technological achievements. Western firms promote their articles also in the socialist countries with a broad arsenal of marketing directed by business interests — developed under the competition common in the capitalist world. Through catalogues, leaflets, agents, advertisements and purposeful participation at various fairs and exhibitions they achieve that their products become obviously known in their special fields. Hungarian engineers have much less information on the achievements of socialist countries, and among them of the Soviet Union. Information is often obsolete and does not keep abreast of the new achievements of the Soviet machine industry. The lack of information results, on the other hand, in prejudice, misbelief and fallacies here, just as it does everywhere.

In the CMEA-countries the degree of information on the machines offered depends partly on earlier traditions of machine exports in the given country and partly on the extent of its export orientation. Both aspects explain why information on the machines of the Soviet Union is relatively scanty.

The situation is further complicated by the fact that in the majority of socialist countries demands for investment goods are determined by items by central decisions. Central organs of the countries concerned specify the machine imports necessary for investments and conclude the trade agreements as well. Therefore, in the Soviet Union less importance is attributed to informing the user enterprises of the socialist countries; lively marketing and promotion activity is judged important mainly in relation to Western markets. Critiques appearing in the Soviet press blaming foreign trade organs for the lack of export promotion usually emphasize the necessity of improving activities only on Western markets.

In recent years some hopeful signs indicating the animation of Soviet export promotion can be observed also in Soviet-Hungarian relations. It may have had a very favourable effect that Hungary was the first among the socialist countries where the representation of the Chamber of Commerce and Industry of the Soviet Union has been opened. There are some other factors, indicating that the Soviet partner has begun to recognize the importance of better information to Hungarian consumers and, therefore, to apply more diversified methods, too (e.g. establishment of a store of prospectuses, sending of descriptive material, etc.). Some machine catalogues have already been sent also translated into Hungarian.

Despite all this the situation has raised also the not very rational task that the importers themselves should take measures aimed at being better informed in their own interest. A domestic organization for "import-research" had to be established, a rather unusual practice in the world.

In recent years several measures have been taken with the aim of increasing the activity of Hungarian foreign trade enterprises connected with machine imports from socialist countries. The Ministry of Foreign Trade has provided for the establishment of special sections at every foreign trade enterprise whose task is to deal with machine imports from socialist countries. Hungarian foreign trade enterprises have representatives in every socialist country; some of them are commissioned explicitly to carry out machine import marketing. (It must be noted that, at the same time, we hardly have enough specialists with adequate qualification for the export activity so important for us.)

Improvement of the domestic flow of information could bring about perhaps the best results. Channels of information accumulated though occasionally but in considerable quantities in the special bilateral commissions for industrial cooperation, in the standing specialized committees of the CMEA, in working groups formed in the course of plan coordination, are not developed enough yet, nor is the exchange of experience between sectoral research institutes and enterprises, and therefore their utilization possibilities are also very restricted. (In Hungary the Institute of Technical Information of the Ministry of Metallurgy and Engineering examines the possibilities of improving the flow of technical information, but not directly from the commercial point of view.)

The Bureau of Socialist Machine Imports established in the framework of the Business and Market Research Institute has already done much and displays an important activity also at present with regard to market research for machine imports from socialist countries, mainly concerning the widening of the assortment of importable goods, the establishment of connections between producers and users and the transmission of the export promoting activity of Soviet foreign trade.

Organization and interests

The formation of such particular channels for the flow of information unusual from the aspect of the organization of social labour has been necessary because there are hardly any direct connections between Hungarian users and Soviet producers.

Soviet foreign trade distributes among the foreign markets the commodity funds put at its disposal by "Gosplan" according to the national economic plan. Thus, both the producers and the foreign trade enterprises receive target figures for distribution and they have to fulfil them. In establishing the target figures productive enterprises have an important part. If their interest requires they may influence also decisions on exports by presenting their possibilities as favourable or unfavourable. Their interests are contradictory as shown by practice. For exports they receive various premia and favours. For example, they receive a given part of the sales receipts in foreign exchange from the foreign trade associations and, in principle, they may spend it freely. In case of over-fulfilment this percentage increases progressively. Despite this, it frequently occurs that producing enterprises are reluctant to undertake export tasks because of higher quality requirements and personal consequences following possible complaints.

The endeavour of foreign trade associations is restricted substantially to the possible smoothest realization of the prescribed turnover. Usually they do not undertake forwarding the special needs of buyers. Their financial interest is connected with the amount of turnover which can be increased most easily by big, homogeneous items. Smaller orders are pushed into the background. They do not strive after including new products into foreign trade. The size of the staff at foreign trade enterprises are not suitable, either, for dealing with specific requirements, small buyers or diversified assortments.

In connection with Soviet efforts made in order to increase machine exports two important organizational steps may be mentioned. Subordinated to the industrial ministries but as independent associations (independently accounting economic units) export directorates were established. The task of these export directorates is to promote exports and coordinate between foreign trade and the producers. They have a share in the export sales receipts and their premium depends on the success of exports.

From the point of view of strengthening the relations between foreign trade and production the setting up of export councils, consisting of the representatives of producers, ministries and foreign trade associations in a given special field, is also of importance.

As against all this, the organization of Hungarian machine imports is not so centralized, it is not some centre that plans and breaks down the requirements and their import ratio, but the real consumers enter directly into contact with foreign trade of their own will.

The user enterprises — except for those authorized to transact foreign trade activity on their own — may submit their demand for import machines either directly to foreign trade enterprises or to an enterprise trading in producer goods performing, as a matter of fact, wholesale functions. In the present practice of import transactions it is, unfortunately, a frequent phenomenon that foreign trade enterprises and enterprises trading in producer goods send buyers and especially small buyers to each other several times. Therefore, incentives and organization should be improved also in domestic practice.

The little interest of Hungarian foreign trade enterprises in socialist imports is usually connected with the fact that imports of Western machines with higher prices mean

higher turnover sums. In our view the real reason is that the additional efforts of those importing from socialist countries are very great and not properly compensated. (There are more problems with regard to the time lag between order and delivery, the date of delivery, servicing and supply with spare parts, etc. It can be added as well that calls for offers are not always answered, orders are not always confirmed or sometimes only partially, etc.) Especially difficult is to widen the range of products and stimulation for it is completely missing.

Structural limits and possibilities

The fundamental task of machine imports in the Hungarian economy is to relieve the domestic machine-building industry from the fragmented production necessary for meeting very varied and diversified needs for machines. This postulates a wide range of products to be imported.

The assortment of Soviet machine exports is, however, strongly concentrated. Statistics on foreign trade covering commodity groups reflect the degree and increase of concentration only to a small extent, since the Soviet Union has some outstanding products to be exported almost in all commodity groups; limitations can be experienced rather with regard to assortment within commodity groups. However, the concentration of machine exports as well as its increasing trend can be seen also from data on commodity groups. In 1960 the five largest commodity groups (trucks, tractors, agricultural machines, road-building machines and equipments as well as cars) amounted jointly to 21.3 per cent of total machine exports. In 1974 the joint share of the five largest commodity groups (aeroplanes, cars, power equipments, spare parts for cars, trucks) already amounted to 33.6 per cent.

In this context it must be taken into consideration that in an economy centralized and controlled with the method of breaking down the plan into addressed targets the requirements of consumers can be best taken into account where the sphere of consumers is very narrow or the requirements of a wide sphere of consumers are homogeneous or can be taken for homogeneous and thus can be summarized in kind. However, meeting specific requirements of a wide sphere of users is difficult, because parametric "refinements" already difficult to follow (interpret) in the summarizing centre come into conflict with the uniform criteria. Naturally, adaptation to the development and transformation of demands takes place only with difficulties and considerable delay even in case of homogeneous needs. This adaptation may take place, namely, only indirectly, through several steps: firstly, consumers have to convince the centre that their needs are justified and useful for the national economy; after that the centre orders development in this direction — at first the desired type of machine should be designed and later on manufactured in a quantity determined in kind, etc. If such forcing measures are belated or are not taken at all, progress will slow down or cease in the given field.

In those cases when central organs are in favour of the justified desires of consumers, keeping the assertion of the interests of the national economy in view, this

system may work, even if with difficulties, long delays and hitches. It must be added that even in such cases a trend can be observed that formal and quantifiable aspects of technological progress are predominant as against assortment.

In the following we try to categorize commodity groups of the machine-building industry according to the "possibility of the central planning" of needs and utilize this categorization — although with major reservations — for the analysis of the structure of Soviet machine exports. (Table 2)

Table 2

*Structure of Soviet machine exports according to the possibility of planning**
(Percentual shares: total machine exports = 100)

Denomination	1960	1970
1. Machines for major governmental projects (complete equipments, machines and equipments for energetic purposes, electronics, mining, oil and natural gas production, for the chemical light and food industries) of which: complete equipments	55.8 49.8	40.7 34.6
2. Machines for monopolistic consumers (rolling stock of railways, ships, aeroplanes)	2.1	12.2
3. Machines manufactured in large series for several consumers (machine-tools, lifting and transporting equipments, road-building machines, roller-bearings, tractors, agricultural machines, trucks and cars)	26.0	25.5
4. Spare parts	5.2	8.7
5. Special machines (instruments)	—	1.6

Source: Внешняя торговля СССР. Moscow, volumes of the respective years.

Although a rather considerable part of machine exports is not included in this categorization, trends are still observable. The share of complete equipments is high although showing a decreasing trend: the proportion of the second group (few producers, monopolistic consumers) is considerably increasing.

Let us now examine the machine exports of the Soviet Union to Hungary in a similar breakdown (Table 3).

The deviation shown by the two tables is very considerable. Hungarian imports lend themselves less to the possibilities of the central planning of needs than the total Soviet exports.

Let us try to look into these deviations thoroughly. Let us examine Soviet supply and Hungarian demand in greater detail within the particular groups.

Table 3

Machine exports of the Soviet Union to Hungary according to the possibility of planning (percentual shares)

Denomination	1960	1970
1. Machines for major governmental projects (from this: complete equipments)	22.4 (19.7)	15.0 (8.2)
2. Machines for monopolistic consumers	0.9	12.3
3. Machines manufactured in large series for several consumers	44.1	48.5
4. Spare parts	12.6	10.8
5. Special machines	—	1.1

Source: Внешняя торговля СССР. Moscow, volumes of the respective years.

Machines for governmental projects

The Soviet Union delivers machines for major individual projects mostly in the form of complete equipments (partly in that of complete factories). The Soviet Union has long traditions in exporting them. In the 1950s and early 1960s this was the main form of machine exports to socialist and developing countries in the initial stages of industrialization. At that time a considerable part of Soviet machine exports belonged to this group (in 1960 almost 50 per cent).

Development of the composition of exports of complete factories and equipments follows the preferences of Soviet investment policy. In the 1950s equipments for the power industry and metallurgy were predominant. Later, with the increasing mechanization of some important industries and occasionally, with the introduction of new, more advanced technology, equipments for such industries appeared in exports, which on the one hand, had not at all or only hardly been included before — for example, machines and equipments for coal mining, oil extraction and oil refining, building materials industry, production of fertilizers, etc. —, and, on the other hand, power and metallurgical equipments were modernized.

Hungary has imported relatively few complete equipments from the Soviet Union in the last few years as compared to other CMEA-countries. The main reason is very likely the fact that her raw material and energy sources are scarce and this restricts the expansion of mining, metallurgical and power investments, whose machines constitute the overwhelming part of Soviet export supply. Major importers buy the largest volumes exactly from these equipments. GDR imports of power equipments amounted to 18 per cent of their total machinery imports from the Soviet Union between 1972 and 1974 as against the Hungarian 3–4 per cent.

What do Hungary's imports of complete equipments from the Soviet Union include? For the 30th anniversary of the Liberation a list was drawn up according to which 50 industrial projects had been established in Hungary with Soviet participation during

the thirty years concerned. In the list 16 projects of the chemical industry, 5 of the machine-building industry, 4 metallurgical, 2 power projects are enumerated (for some reason, deliveries for the Gagarin Power Station were omitted), as well as 7 factories producing pre-fabricated elements for dwellings, 8 other projects of the heavy industry, 3 of the light and food industries, respectively, and 2 infrastructural projects. It should be noted that this sectoral distribution is significantly influenced by the fact whether items on the list are taken as a whole or broken down. For example, the Duna Ironworks are indicated only as two items: in the first one foundries, the hotrolling mill, the cold rolling mill, the oxygen factory, etc. are jointly taken into consideration, while the second comprises the first continuous steel foundry delivered in 1973. On the other hand, 7 out of the 16 investments in the chemical industry mean the establishment of various plants in the Duna Oil Refining Enterprise. From this the conclusion can be drawn that numerical data characterize the proportions imperfectly.

The import of technological equipments involves less and less buying of complete factories or technologies in one country, but rather the gathering of products of firms specializing in various partial units. This is otherwise a world tendency. At a higher technical level it is hardly conceivable any longer that all elements of a technological system can be manufactured by one firm or country in satisfactory quality. The direction of international specialization points not towards technologies, but machines to be built in into technological systems. For example: the supplier of the olefin works of Lenin-város, the West-German firm Linde brought 15 per cent of the machines built in not even from the FRG, but from a third country. Manifestations of this process can be found also in the USSR imports of complete equipments and sometimes even in its exports. When establishing new domestic factories the Soviet Union worked several times with foreign main contractors; in other cases factories were established on the basis of Western patents and machines as well as machine sets were bought in large quantities from various Western countries and firms. When buying a licence, usually forwarding to other socialist countries is stipulated as well (for example, steel casting with oxygen converter). The Soviet Union undertakes more and more frequently also to help socialist countries in establishing factories similar to those built in the Soviet Union in this way by putting plan documentation at disposal and displaying an activity of main contractor character, including also the purchase of machines. Thus a certain part of machine deliveries consists of Soviet machines, another part derives from Western firms and is bought by the Soviet Union on behalf of the importer country — usually at more favourable terms resulting from its position.

Such setups provide good conditions for the expansion of Hungarian machine imports at a high technical level. However, these favourable possibilities — similarly to the entirety of Soviet supply of complete equipments — are limited only to relatively few manufacturing branches and for the solution of several tasks indispensable for the development of the Hungarian economy there is no competitive supply at all.

Machines for monopolistic consumers (railways, air transport, etc.)

This group of machines, including railway vehicles, aeroplanes and ships, takes a very important place in the exports of the Soviet Union and its increase has been the most considerable in the last 10–15 years. Especially the export of aeroplanes has expanded to a great extent, reflecting the achievements of Soviet aircraft production (in 1960 it amounted to 0.4 per cent of total exports in 1973 to 11 per cent and in 1974 to 8.2 per cent, respectively). Hungary's import also had a part in this increase. The joint share of these three groups of products in total imports from the Soviet Union was 18.5 per cent in 1973 and 12.8 per cent in 1974, while that of aeroplane imports 14.3 and 7.6 per cent, respectively.

In this sphere of products, where production and consumption are strongly centralized, the possibilities of increasing imports are especially favourable by relying on the outstanding development of Soviet production. The possibility would further improve if some way were found to meet demands also in passenger-carriages and waggons which are bottlenecks for the time being.

Machines manufactured in large series for several consumers

Vehicles, lifting and transporting equipments, machines for the building industry, agricultural machines, etc. were ranked here.*

The attention of Soviet economic control and management – in connection partly with the further development of infrastructure, partly with the acceleration of construction works and partly with the promotion of agricultural production – is more and more concentrated on these machines, used mostly outside the industry, as well as on the permanent increase of their performance. Achievements in this field of the Soviet machine-building industry provide excellent possibilities also here to expand exports and to increase Hungarian imports continuously and on a large scale. A considerable part of Hungarian import is concentrated in these commodity groups and the import in these commodity groups is strongly increasing year by year.

Demand in this sphere of products is usually great – greater than the volume the Soviet Union is able to deliver. This general situation is motivated, however, by certain deviations and problems of assortment. Demand exceeding supply occurs especially with agricultural machines (combine-harvesters) and tractors where the effect of the mechanization of Soviet agriculture can be strongly felt. (This appears mainly when determining

*Practically, a considerable part of machine-tools is not manufactured in large series, thus only standard types would belong here. (The situation is similar also with roller bearings, although in this case large series are more characteristic.) Nevertheless, in lack of separable data, all machine tools have been included.

quotas and in the difficulties of enforcing import demands above the given quotas.) Problems in assortment are caused partly by the fact that Hungarian agriculture requires tractors and combine-harvesters of bigger capacity whose export is lagging behind in the Soviet Union and partly because a wider assortment of small machines would be necessary, which, however, are missing also in the Soviet Union and are under development. On the basis of all these the demands of Hungarian agriculture for machines raised in connection with an important development trend cannot be met by Soviet imports: from the assortment of Soviet machines those of high capacity necessary for developing production systems are missing.

The import of Soviet trucks is somewhat restricted, apart from the limited supply as regards both quantity and assortment, by the high fuel consumption of Soviet (gasoline fuelled) trucks exceeding Hungarian norms. A sudden change can be expected in truck imports from the Soviet Union – and thus on the Hungarian truck market – following the putting into operation of the Kama factory manufacturing diesel-trucks. This will be similar to the turn brought about by the appearance of the Lada-cars on the market after 1971. It is expedient to prepare for this change in advance.

Spare parts

Spare parts are summarized in a special group because both their production and adaptation to the demands of users raise several special problems. Shortage of spare parts is a chronic phenomenon in the CMEA countries (the reasons for this have already been mentioned previously). In the trade of CMEA-countries between each other spare part deliveries not adjusted either to the turnover in finished machines or to the requirements of customers are characteristic features also in general. The situation in this respect has hardly improved recently, despite the fact that mutual obligations were formulated at high level to this effect.

Special machines

Central planning of production and consumption is most difficult in the group of engineering products where diversified requirements of several buyers should be met by a wide assortment. Such a sphere can be found in almost every group of products of engineering, but their proportion is undoubtedly the highest in the precision engineering industry.

The achievements of the Soviet Union in space exploration and rocketry prove that central control coupled with the concentrated utilization of science and technology may result in the production of an assortment of instruments of a certain range meeting the highest standards. Where this sphere is widened surprising results may be obtained within a short time (for example, in the industry producing medical instruments rapid progress has been achieved in recent years by taking over achievements of the space programme).

By their nature, this group comprises, in general, the import of productive spare parts, partial units, standardized elements, fittings, complementary items, etc. based on

specialized production. This covers a very great part of the trade between countries with developed engineering industries.

Such items are hardly included in the machine trade between socialist countries, apart from the turnover in productive spare parts connected with production cooperation and specially established for this purpose. The trade in these production elements between the socialist countries is impeded, beside difficulties of standardization, mainly because specialization of production of this kind, namely, by spare parts, is much backward even within the individual countries.

Proportion of non-technological machines

The composition of Soviet machine supply and Hungarian machine demand, respectively, has been examined also from another point of view. We have tried to divide Hungarian machine imports from the Soviet Union into technological machines (participating in industrial production) and non-technological machines (to be used outside the industry), and then to compare it in a similar grouping with Hungarian machine imports from other countries. For statistical reasons this "division" could be realized in practice only in such a way that, on the basis of the so-called CMEA-grouping of machine imports, three groups were selected which include unambiguously non-technological machines ("lifting and transportation equipments", "tractors, agricultural machines and equipments" as well as "vehicles and complementary equipments") and their joint share was examined (Table 4).

Table 4

Hungarian imports of non-technological machines by major sources

Area of origin	1973		1974	
	millions of foreign exchange Ft	total machine import from the given area = 100	millions of foreign exchange Ft	total machine import from the given area = 100
Total	5168	44.3	6746	44.0
Socialist countries	4504	52.3	5678	50.9
Developed capitalist countries	662	21.7	1066	25.5
USSR	2002	53.6	2292	50.5
Bulgaria	142	73.2	211	67.6
Czechoslovakia	689	48.0	888	47.8
Poland	406	51.7	505	46.7
GDR	861	45.1	1449	51.1
Roumania	359	77.9	291	72.5

Source: Statistical Yearbook, 1973 and 1974. Central Statistical Office, Budapest.

The results obtained are remarkable: in the imports from developed capitalist countries the proportion of non-technological machines is very low (20–25 per cent), but in these from CMEA-countries very high (around 50 per cent; and from Bulgaria and Romania even more than 70 per cent). This indicates, on the one hand, the high importance of technological machines in the Hungarian demand for machinery, since three quarters of the amounts spent on machine imports from the West are spent on such machines, and, on the other hand, it indicates the limitations of the supply by CMEA-countries of technological machines. Possibilities for the imports of technological machines from socialist countries are surely greater, but a forced change in proportions would do more harm than good.

Finally, we should like to emphasize — with regard to the future — that the importance of expanding machine imports from the Soviet Union is determined first of all by the fact that Hungarian demand for machine imports is of a wide range. Besides, in bilateral relations also the pressure for balancing imports and exports is great. Since raw materials will participate in the further increase of total imports from the Soviet Union presumably only to a diminishing extent, the role of machine imports, determining our export possibilities will increase. However, in our view, this should be subordinated to the efficiency requirements: machine imports should be adapted to demand and to the competitiveness of supply and in this field — beside looking for new possibilities — realistic limits have to be reckoned with, too.

НЕКОТОРЫЕ ХАРАКТЕРНЫЕ ЧЕРТЫ ВЕНГЕРСКОГО ИМПОРТА МАШИН И ОБОРУДОВАНИЯ ИЗ СССР

И. ШВЕЙЦЕР

На базе анализа опыта ввоза машин и оборудования из СССР в Венгрию автор рассматривает возможности его дальнейшего расширения. Опыт показывает, что ряд типов машин и оборудования, предлагаемых Советским Союзом, является конкурентоспособным на венгерском рынке как по своему качеству, так и по ценам. Трудности возникают в связи с недостатками в предоставлении сервисных услуг, в особенности в снабжении запасными частями. Расширению импорта машин и оборудования препятствует также и недостаточная гибкость системы планирования и организации внешнеторговых связей. Между странами-членами СЭВ в рамках долгосрочных соглашений о товарообмене устанавливаются контингенты планируемого товарооборота и по таким видам оборудования, по которым невозможно на восемь лет вперед прогнозировать потребности. Недостаточная заинтересованность внешнеторговых организаций, а также недостатки, наблюдающиеся в прямых связях между советскими производителями и венгерскими потребителями и в товарной пропаганде, препятствуют прежде всего расширению ассортимента импортируемых машин. А ведь это было бы очень желательно. Ибо анализ структуры ввоза машин и оборудования показывает, что главным препятствием более быстрого роста оборота является слишком узкий ассортимент импортируемых изделий. Для развития же венгерского хозяйства требуется диверсифицированный ввоз машин и оборудования в широком ассортименте, так как только в этом случае можно специализировать и продукцию венгерского машиностроения.

REVIEWS

B. SZALAI

AGRICULTURAL EXPORTS AND THE EQUILIBRIUM OF THE BALANCE OF FOREIGN TRADE IN HUNGARY

It is a remarkable feature of Hungarian economic development that the role of agriculture in balancing the import of raw materials and other products was important not only in the initial stage of industrial development but has remained so later on. During the past 15 years the share of agriculture and the food industry in the country's total exports was ranging, with relatively small fluctuations, around 23 per cent, and represented an about 36 per cent share in exports settled in convertible currency. During this period imports amounted to about half of exports in the turnover of agricultural and food products while the other half of exports, as the net exports of this commodity group, secured the imports of other commodities, mainly raw materials.

The special role of agriculture and food industry in the foreign trade of this country is shown clearly by a comparison of the commodity patterns of world exports and Hungarian exports.

Table 1

Commodity pattern of world exports and Hungarian exports (1974)
(per cent)

	World exports	Hungarian exports
Agricultural commodities and food products	11.3	23.3
Raw materials	9.0	5.0
Fuels	20.4	1.1
Chemicals	7.6	7.5
Machines	24.6	33.3
Other articles	27.1	29.8
	100.0	100.0

The striking main difference between the composition of world trade and of Hungarian exports is the low share of raw materials and fuels in Hungary's exports, only 6.1 per cent, while the export of agricultural commodities and food products is relatively significant; in world exports, on the other hand, the 29.4 per cent share of raw materials

and fuels is relatively high, while the proportion of agricultural and food products is much less (11.3 per cent).

At a recent conference economists have had a minor debate about how to qualify Hungarian climatic and other natural conditions from the point of view of agricultural production. May we claim to have "very favourable" conditions? The common platform has been reached that our natural conditions should be considered rather to be "relatively favourable". Although we have plenty of sunshine and the soil is rather good, the distribution of precipitation is uneven and draughts occur frequently in considerable areas of the country. Although natural conditions afford us the possibility to develop diversified production structure, several countries have a similar climate. The good results of agricultural production are to a high degree due to the effective utilization of relatively favourable conditions through economic policy, traditions and production experience, modern technology and chemicalization. After the socialist reorganization the Hungarian agriculture and food industries have developed at a rate higher than the international average and have been capable, while satisfying the demands of the population, to serve the interests of foreign trade and of the balance of foreign trade with considerable exports.

The share of exports in the output of the food economy steadily increased between 1960 and 1975; the export ratio of agricultural production was about 15 per cent and that of the food industry almost 20 per cent. The deviations from the average by products are great. In 1975 4.5 per cent of the maize crop and 23 per cent of the wheat crop were exported, while the export ratio of salami production was 58 per cent and of canned vegetables 71 per cent.

The share of Hungary in the world exports of foodstuffs and other agricultural products is around 1.5 per cent, but with certain products it is much higher. Our percentual share in world exports was the following in 1974: salami and sausage products 13.3, poultry meat 11.9, apples 11.9, spice paprika 11.8, live sheep 7.8, honey 6.6, wine 5.1, and live cattle 4.6 per cent.

As to the economic role of agriculture and the food industry Hungary's position is different from most countries though not unique. In 1975 the share of these branches in Bulgarian exports was 32 per cent. The export patterns of the Netherlands and Denmark are also worth attention. Both countries have advanced industries and they are not behind the average of the West European countries as regards per capita national income, yet the products of agriculture and the food industry constituted 26 per cent in Danish and 23 per cent in Dutch exports in 1975. The Dutch export of these products is about four or five times as much as Hungary.

Comparison and trends of food exports in Hungary

From 1971 to 1975 the value of gross output in agricultural production increased at constant prices by 18 per cent over the preceding five years, at an annual average rate of 3.4 per cent. Output in the food industry increased at a somewhat higher rate. During the

Table 2
Composition of exports of food products (per cent)

	1970	1971	1972	1973	1974	1975
Exports of	100	100	100	100	100	100
a { Agricultural products	45	41	45	53	49	43
{ Food products	55	59	55	47	51	57
b { Plant products	56	49	51	60	62	60
{ Animal products	44	51	49	40	38	40

same period the exports of agricultural and food products increased (at comparable prices) by round 7 per cent annually. At current prices this growth was much higher since in 5 years the Hungarian enterprises attained a 33 per cent price increase in exports transacted in roubles and about 40 per cent in exports in convertible currencies.

Table 2 shows that the share of food products was nearly every year higher than that of agricultural products whereas the share of products of vegetal origin was higher than that of animal products.

The difference between the composition of exports in roubles and those in convertible currency is marked. In exports in roubles the degree of processing is higher, food industry represents a 70 per cent share. Another feature of the exports is that they consist of products of chiefly vegetal origin; in 1975 more than 60 per cent of such exports was made up of vegetables, fresh fruits, canned vegetables and fruits, and wine. Animal products represent a more modest proportion.

From the exports of food products in convertible currency the bulk in 1975 consisted of wheat, maize, live and slaughtered animals and poultry. The degree of processing was lower, the share of the food industry was slightly below 5 per cent. Nevertheless, in recent years the exports of processed meats, canned vegetables and fruits, vegetable oils and wine have also increased remarkably. The large increase of grain exports from 1973 on has resulted in a remarkable change in the commodity pattern of these exports.

Calculated in forints on the basis of the Hungarian commercial rates of exchange, about 50 per cent of the agricultural and food exports in 1975 were directed to the socialist countries and 50 per cent to the advanced capitalist and the developing countries. The socialist countries absorb also a considerable part, nearly 30 per cent, of the agricultural and food exports in convertible currencies.

Among the CMEA countries the Soviet Union, the German Democratic Republic and Czechoslovakia are the most important markets of Hungarian agricultural and food products. Hungarian foodstuffs are renowned and in great demand in these countries. Shops in Moscow, Berlin, Prague offer a rich assortment of Hungarian Jonathan apples, Pick salami, Csabai sausages, Globus tinned food, Hungarian brand wines all the year round.

Among the advanced capitalist countries the German Federal Republic is the biggest market for Hungarian products, followed by Italy, Austria, Switzerland, France, and the USA. As regards the oil producing countries, our foreign trading companies have worked intensively in recent years in Iran, Iraq, Libanon, Kuwait and Lybia. They have to overcome many initial difficulties, adapt themselves to the special requirements of these markets and manage complicated transport problems.

The balance of the trade in agricultural and food products doubled between 1970 and 1975. In 1975 it covered approximately the total Hungarian imports of crude oil, natural gas, coke, coal, fuel cake, cellulose and wool. If the balance of this commodity group is calculated by subtracting from the total volume of exports also the imports for direct agricultural purposes (machines, fertilizers, plant protective agents) together with agricultural and food imports, then the balance will be reduced by about 35 per cent. Besides the favourable effect of this branch on the balance of foreign trade it is a negative symptom that the Western import content of exports has increased markedly in recent years.

Plans till 1980

The five-year plan for 1976 to 1980 provides for maintaining the rate of development attained during the previous five years in agriculture and the food industry, i.e. for an average yearly increase of production by 3 to 4 per cent. For a few products of prime importance for exports the growth target is much higher than the average. A continued dynamic increase of wheat and maize production is expected from the wider application of the tested production systems. A fast growth of vegetable and fruit production is also hoped to follow the diversified measures taken and the organizing work done. The plan provides for an increased rate of growth in the food industry. High capacity meat combines will be built in Gyula, Szekszárd and Kaposvár; and a new salami plant will be presumably built in the area beyond the Tisza after the new Szeged salami factory will have been completed. Canning and other factories will be expanded. A new vegetable oil factory will be built and liquid sugar production from maize will begin. Production of the food industry will increase faster than agricultural production, at a rate above 5 per cent per annum.

According to the plan the export of food articles is to increase (at comparable prices) by 40 per cent in 5 years, i.e. by 7 per cent on annual average. Deliveries of fresh vegetables, fruits, wine and canned food will increase markedly in the turnover in roubles, but exports of grains and certain animal products will grow as well.

In the trade in convertible currencies (with an average yearly increase supposed to exceed 8 per cent per annum at comparable prices) the exports of wheat and maize, sheep for slaughter, salami, tinned ham, fresh fruits and vegetables and of canned foods will strongly increase. Exports must be increased of any product with an output permitting it. Beside the high-volume export products already introduced effectively, articles sold in smaller quantities or not exported at all should be also paid attention to. Agriculture and the food industry can offer many a new opportunities for exports in this respect. Rabbit

breeding is a good example of the considerable returns of the so-called small products if carefully organized. Bee farming, game export, and exports of vegetal flours for forage, various seeds and propagating materials have, or promise, similar results.

The provisions of the five-year plan contain the main articles and define the target figures for total exports. It is a common task of the agricultural and food industrial, as well as of the foreign trading organs to find the products required for plan fulfilment. We intend to maintain about the established ratio of the socialist countries in the trade settled in convertible currencies.

Beside quantitative targets the five-year plan comprises important requirements towards improving the efficiency of production and exports. Improvement of the commodity pattern of exports and the planned increase of sales prices will advance these objectives.

In this five-year plan period also the imports of agricultural and food products will be increased. It can be established from the analysis of the commodity pattern that a part of imports consists of products indispensable for modern agricultural production, for increasing the quantity and improving the quality of products. To this commodity group belong vegetal and animal protein fodder, furthermore, in much smaller proportion, animals for breeding, seeds and propagating materials. Higher than average import rate is forecast by the plan for items not produced at home such as coffee, cocoa, citrus fruits in order to satisfy the populations' needs. The third group of the imports of the branch comprises products in respect of which satisfaction of a part — perhaps a growing part — of needs seems rational in the framework of the international division of labour beside domestic production. Here belong for example sugar, tobacco, barley, different canned foods and other products. Motives for the lasting imports of such commodities may be manifold; the main drive is either to expand the domestic assortment of commodities or to render production more economical and efficient. Certain agricultural and food products are imported instead of producing them in Hungary because they are cheaper than the domestic production costs. Efficiency can be improved e.g. by changing the production cultures so as to attain economically more advantageous results on identical areas and with identical inputs. Barley is imported, i.e., exchanged for maize, because of such considerations.

The foreign trade targets of the branch are invariably characterized by much higher exports than imports, thus a considerable surplus is to develop year after year. According to the data of the computation material of the plan, in the interest of the equilibrium of the balance of foreign trade, the surplus should increase in the trade in roubles by 35 per cent and in that in convertible currencies by 60 per cent by 1980, relative to 1975.

External conditions of growth

The most important external conditions are: the expected development of the future demand for Hungarian products, i.e. of the needs of the socialist countries, as well as of the needs and market opportunities in Western markets.

For the five-year plan period up to 1980 the frameworks of our exports to the CMEA countries are virtually determined by long-term agreements and special contracts. However, since in the course of negotiations the claims of the socialist countries could not be fully met, there are verbal and written agreements about continuing to study with our partners the ways and conditions of a better mutual satisfaction of each other's needs. New constructions observing mutual interests are elaborated on that basis and will result in further expansion of shipments. At the same time, under CMEA auspices, the representatives of our countries are already working on the preparation of longer-term programs aimed at cooperation through 10 to 15 years. With the development of socialist integration the highly receptive market of the CMEA countries will keep providing our agricultural production with a safe background.

In the long run a lasting demand for staple foddstuffs and agricultural products is reckoned with in the Western markets too, but transient disturbances are possible and even probable. Unfavourable market tendencies, economic stagnation or recession may cause difficulties. Hungarian agricultural exports to the traditional Western markets may be checked also by protectionistic Common Market resolutions disregarding the international division of labour and the interests of foreign exporters. Mitigation of the detrimental effects is feasible in several ways. The most important ones are, beside developing relations with the socialist countries, to open up new markets, to enlarge the market base of our agricultural and food exports. New opportunities are offered mainly by overseas capitalist countries with advanced industries and by the oil producing countries. Foreseeably, the share of the Common Market will further diminish in Hungarian food exports, nevertheless Western Europe is assumed to remain in the long run an important market absorbing these products. We may perhaps hope that the interests working in favour of the improvement of the international division of labour, and sober reasoning, will sooner or later have their appropriate influence on the competent West European quarters. It may be also anticipated that the CMEA initiative for the consolidation of relations will find response in the Common Market countries and, even if at a rate slower than required, will ultimately bear fruit.

The domestic conditions

The regular reports made by our foreign trade missions about the market conditions and the reception of Hungarian products abroad are highly revealing as regards the changing foreign economic conditions and the related domestic tasks. The reports unanimously state that most of the products of Hungarian agriculture and the food industry are of a good quality and, for this reason, are demanded and increasingly saleable in foreign markets. There has been some improvement in the recent years regarding the satisfaction of individual, special requirements of buyers, in observing dates of delivery and in the packaging of goods. Still, there are different opinions about the products. The buyers are satisfied with the wheat shipments. Hungarian maize is considered to be of excellent quality. There is a liking and demand for beef because of its good taste, 'light

colour and marble pattern' in Italy and some other countries of Western Europe and in the Soviet Union alike. "The only problem of exports of sheep for slaughter is that we are unable to satisfy the quantitative requirements of the market. The buyers are content with the quality of the goods", stated our trade mission in Lybia. (Of course, there are certain markets where the Hungarian fattened lambs are considered to be too fat.) Pick's salami stands up to any rival, the tinned ham manufactured with new technology is not worse than the best Danish, Dutch and Polish goods in the international market. Regarding chicken export the buyers are quoted as appreciating them for their high quality and good taste, processing has also much improved in recent years and by now it is packed adequately. Hungarian fruits are generally known after their flavour, brand wines after bouquet, and many of our canned food are in demand. Friends from the GDR, analysing our food exports, said jokingly that our products added to the atmosphere of their feasts because Hungarian goose, red apples and good wine belong to a pleasant Christmas.

Appreciations and acknowledgements notwithstanding, criticisms and objections come sometimes even from our socialist partners. Their opinion and requirements are identical with, or only slightly different from, those of the Western clients.

Quality objections are generally made not to some permanent imperfection or shortcoming of a given product which would call for downrating the product. Relatively few of our export items are such. Buyers complain more frequently that some shipments of a certain product are sometimes of poorer quality, or that quality is uneven. Many buyers react to delays sensitively, they disapprove deviations from the approved terms of delivery. The third type of critical remarks concerns the not always up-to-date packaging and the cumbersome and slow satisfaction of the buyers' special demands.

There is a reason for every shortcoming, and some of them are not easy to change either. Yet we must be aware of that ultimately the Hungarian economy will pay for each shortcoming of our deliveries. It may be taken for granted that in the majority of cases the additional work or other input required for the fulfilment of the buyers' requirements demand less sacrifice than the deriving financial advantage is worth. In this respect the market price may be compared to the most sensitive barometer: the price will unavoidably decrease with deterioration in quality and unreliable deliveries, but the price may be raised if the performance improves. Business fluctuations affect the functioning of this 'barometer' only to a minor extent.

The big role confidence plays in trade is well known. Favourable high price is paid by the buyer to a seller who delivers quality goods at the expected date and adapts flexibly to changing demands and requirements. The satisfaction of buyers does not only mean higher prices but greater business security as well. Exporters whom the buyers trust, whose goods are in demand, need not worry so much about worsening situation, stagnation, or crisis in Western markets. In a difficult economic situation the buyers will cut purchases first from the less satisfactory sellers. It may be observed that under unfavourable market conditions — when prices go down — the best exporters usually suffer less damage.

Considering the great anticipations of the economy towards agriculture in the coming years we have to reach the conclusion that, while satisfying the demands of domestic supply, in the future more marked preference should be given to export targets in this branch too. It is necessary to put greater emphasis on foreign trade orientation also in agriculture and the food industry. Whether we look at development policy, the system of stimulation, price policy, or the system of contracting, or production organization and control, it is impossible to take proper decision without painstaking consideration of the foreign trade connexions. If till now we have measured the favourable economic impacts of the strengthening alliance of workers and peasants first of all by the adequate food supply to the population, in the future we have to attribute increased importance to impacts related to foreign trade interests and foreign economic equilibrium.

The Hungarian Government has recently passed a resolution about the tasks related to the implementation of the five-year plan, and has deemed that the encouragement and strengthening of enterprising spirit is the most important. This kind of assistance by governmental and monetary bodies may be a very important contribution indeed to the solution of foreign trade tasks. The number of farms and enterprises that have already been exemplary is quite high in agriculture and the food industry. In recent years leaders of good many a state farms, cooperative farms, food industry factories have earned acknowledgement and reputation because of their susceptibility to the new trends and their courage in taking risk. A new impetus may be given now to the strengthening of enterprising spirit by the new encouragements, stimulation and improvement of management conditions.

Besides the increasing production of state farms and cooperatives it is invariably important to utilize and stimulate the household plots and auxiliary farms which have a bearing on foreign trade interests mainly through certain animal products and through vegetable and fruit production.

Satisfaction of the needs of the population is the basic task of agriculture and the food industry. It is, however, justified to draw such conclusion from the increasing foreign trade orientation that in case of any weaker crop the ways of satisfying domestic demands while fulfilling export commitments too, must be pondered carefully. Occasionally it is better to resort to additional imports — if that is feasible at acceptable economic terms — and avoid, as far as possible, the interruption of continuous exports. Namely, the halting of export destroys the credit of Hungarian exporters. This, even if not striking or immediately apparent, can be more detrimental in the long run.

New methods and forms of foreign trade activity

Contemporary conditions call for changes in foreign trading activity too. New methods, new business forms prevail in world trade. Trade in foodstuffs is quite different now all over the world from what it used to be only 10–15 years ago. Department stores have attained an important role. An exporter who sells his products directly to the

department store can place a large quantity of goods with increased security. Hungarian foreign trade, too, has its own experiences in this field; our companies are among the regular exporters to several European department stores. The deriving advantages are coupled with new requirements: department stores usually have small store-rooms of their own, therefore they insist on accurate continuous deliveries, on occasional postdeliveries of smaller contingents, and expect unchanged quality more than any other buyer.

It is a general tendency to eliminate the middle-men from the chain of marketing. One of the ways is to organize companies with mixed ownership, associations with foreign partners. Certain initial experiences of the Hungarian enterprises are promising in this respect, too. Through the mixed company the exporter may get nearer to the customer, to the ultimate user, can learn his requirements better, and can also earn additional profits.

Representatives and agents hold important positions in the market organization. They are not always replaceable or substitutable by our own people, the local customs and conditions do not allow for that everywhere. Much depends on the successful selection of the agent, of the suitability of foreign companies for representing our foreign trading company and for promoting the most advantageous marketing of Hungarian products. It is a permanent task and intention of our companies to improve and reinforce the network of agents through proper replacements.

More favourable conditions may be attained in the Western markets for marketing food products by entering into production cooperation with Western companies which have a sales network of their own beside their production plants. Thereby not only the production of new commodities complying with local taste and demand is enhanced but also the marketing of the product may be taken over, partly or wholly, by the foreign partner. Several food industrial companies and large farms have realized the advantages of cooperation. The relations established already in the sixties between Magyar Hűtőipar (Hungarian Deep-Freezing Industry) and the Swedish Findus Co. belonging to the Nestlé concern may be quoted as an example. In the framework of this cooperation the Swedish company handed over the deep-freezing technologies and production recipes for certain types of vegetable, and lent processing and packaging machines, and also ceded its knowhow of vegetable production. The cooperation is advantageous for both parties. More courageous and quick implementation of new cooperation concepts is the common interest and common task of production and of foreign trade.

Marketing security and stability can be increased if the seller and buyer have a long-term contract valid for several years. Besides the socialist countries also some of the Western partners are willing to conclude contracts even for four to five years.

The marketing of agricultural and food products might be enhanced also if the ideas regarding the exportation of complex agricultural systems could be realized. If agriculture and foreign trade cooperated, e.g. in the establishment of model farms in a developing country, this would be accompanied not only by the selling of machines and equipment but would provide, besides production technologies, for the additional export of breeding stock, seeds, and other products.

Agricultural production may be effectively helped by imports if realized at the desired date and in the necessary composition. This is particularly significant in this country since we purchase about 50 per cent of the machines used in agriculture from abroad. Moreover, there is a considerable import of fertilizers and plant protective agents. Continuous good supply of machine parts, the importing of plant and animal protein fodders in time, the refreshing partly from abroad of certain seeds and propagating materials are important. By paying attention to the satisfying of agricultural import requirements the foreign trading organizations render direct service to production but indirectly they help solving the export objectives.

Realization of the targets of the five-year plan necessitates further improvement and development of cooperation between production and foreign trade. In these relations a specific situation, different from the one in industry, is produced by the circumstance that the bulk of agricultural products is purchased by trusts, national companies and trading organizations, these store and classify the goods as required, then sell them either at home or hand them over to foreign trading companies for exportation. This structural pattern of trade and the large number of forms in agriculture restrict the possibilities of the specialized foreign trade companies to contact the agricultural productive units directly. Their domestic partners are usually the trusts and the national companies.

Common interest is a condition for a good cooperation. Experiences show that agreements between agricultural, food industrial and foreign trading companies specifying the sharing in business gains as a target work better than the simple commission business. Till now, precisely because of the specific situation and the system of trading outlined above, the direct export interests of producing enterprises have been relatively restricted in agriculture. Important interests are attached to letting the production plants directly feel the changes in market prices, whenever this is possible. It is obviously stimulating and encouraging for better performance if the additional income or its majority deriving from the improvement of competitiveness is given to the producers.

Mutual information is a very important point in the cooperation between agricultural and food industrial organizations and foreign trade companies. The insight of production managers into the market has greatly improved in recent years. Foreign trade companies provide regular information about sales and about the requirements of the buyers. They strive to give an objective and true picture of the judgement of our products and deliveries abroad. The position taken by the Hungarian products in foreign competition must be seen more accurately: which products are at the top and why, which ones and in what respect are behind the foreign articles in the competition. Of course, each company intends to attain the highest market price — with identical tariff terms. If that is not possible, the reasons must be exposed and the ways of changing the situation and of improving competitiveness must be studied jointly with the agricultural organizations and the food industry.

For instance, Hungarian cattle and beef is in the highest price category in Italy and North Africa; our companies sell paprika and honey in Western Europe at higher prices than the competitors. But the producers must also know that the quality of peas is

behind that of the competitors and therefore sells only at a lower price, and they must not rest satisfied with that. If the lower price was caused by shortcomings of the foreign trade organization or of marketing work, these have to be improved. Price analyses are of high importance from the point of view of organizing and controlling production and foreign trading activity. For this reason it would be a pity if market informations got stuck in the headquarters of trusts and national companies. Continuous information of the many production units is not easy to organize but it is absolutely necessary. If the productive plant is not informed about the foreign market repercussions and judgement of the products it exported, it will not be able to orientate itself properly nor to take correct decisions about its future tasks.

It is a specific feature of the changes in market prices of agricultural products that there are marked price increases and decreases sometimes even within a year. Therefore, the optimum date of purchases and sales as well as the quarterly timing of deliveries must be observed. The agricultural and the foreign trade companies have to decide about these questions together because only together can they manage the occasionally highly complicated forwarding, storing and financial problems.

The great change in the external economic conditions during the latest years is another argument for regular information. The modifications in relative prices call for control calculations, because, once the companies intend to establish a more favourable export pattern, they have to reckon with the current and the expected prices and not the old ones. This requirement is true not only for exports but also for imports. For example, it is not sure that the most economical fodder mix is the same today as two or three years ago.

The foreign trade organizations are therefore justly expected to provide market information not only about the past and the present but that it should be foresighted and prognostical. This is a more difficult task because not all the factors with a bearing on the future lend themselves to appropriate analysis. Nevertheless, it should be attempted even at the risk of error. Thus, by outlining the expectable market conditions for the major products, foreign trade can contribute to providing better grounds for decisions on investments, development and management.

It follows from the aforesaid that in the future agriculture, the food industry and foreign trade shall have to do the planning, calculating and programming, and formulate their business and price policies jointly on all levels, in ministries and companies alike, and for the joint determination of objectives and the right choice of methods they have to carry on with the joint consultations they have commenced.

What will happen till 1990?

Calculations were made about the probable development of agricultural and food exports till 1990. It was examined whether in this span too they will be capable of playing the role in foreign trade they have played in the last 15 years. In the course of the

long-term planning work experts prognosticated an annual 7 to 8 per cent growth of foreign trade turnover, and claimed that this rate of export growth could be founded. We searched for an answer to the question whether a similar rate of development of agricultural and food exports could be envisaged over such a term. Considering the domestic development tendencies of the previous years and the experiences of other countries it has been concluded that if three conditions were satisfied, a yearly 7 to 8 per cent increase of agricultural exports can be attained even over a 15-year term. First condition: a production increase at an average annual rate of 3–4 per cent; second: utilization of about 50 per cent of the yearly increment of production for export purposes; third: increased attention to export interests in the formulation of agricultural development targets, as well as in the stimulation and control of production.

In case the above conditions are satisfied agricultural exports could be almost tripled in 15 years, its share would remain unchanged or only slightly lower, that is, its role played in foreign trade could be on the whole maintained at a higher level.

The question might be raised: which other branch or branches could substitute for agriculture, if it failed to fulfil its usual role in foreign trade in the future? The requirements raised towards the engineering and the chemical industries are already high in our international relations and will presumably increase. It is a reasonable demand that planning ought to draft alternatives for solving the most important problems of the economy. The work of long-term planning is continued and it is expected that variants will be elaborated for the development of the major export carrier branches. However, whichever of the variants will come to the fore, agriculture and the food industry will have a very important role also in the next 15 years in exports and in balancing the raw material imports of Hungary while providing for adequate domestic supplies.

A. JUHÁSZ

DEVELOPMENT OF THE ALUMINIUM INDUSTRY
IN HUNGARY

On the central development program of the aluminium industry

The Central Development Program for the Aluminium Industry passed by the Council of Ministers in 1970 and updated in August 1976 sets up the trends developing an important industry in the long run. The postulate for the dynamic and proportional development of Hungarian aluminium industry and for expanding the wide ranging relations already established within the international division of labour is, together with the primary requisite to develop the production of semi-finished and finished products, a considerable increase of the domestic alumina output. Rapid improvement of productivity and of the quality of finished products, the effective utilization of the excellent intellectual capacity accumulated in this industry are required to keep the aluminium industry our long lasting trade.

The grounds for the 15-year central development program of the aluminium industry approved by the Hungarian government in 1970 are provided by our bauxite deposits which are considerable even on a European scale, as well as by the Hungarian-Soviet alumina-aluminium agreement concluded in 1962 that might be quoted as an outstanding model of the socialist economic integration. The main objective of the agreement was to coordinate Hungarian aluminium industrial production with the opportunities afforded by the bauxite deposits. Namely, the planned extension of this agreement and the maintenance of the agreement with Poland are expected to provide for the metal requirements of the processing branches considerably exceeding the domestic primary production. For the coordinated development of basic material production and of semi-manufactures and finished products, the program coordinates the activities of companies belonging to a number of industries (mining, metallurgy, engineering and building industry, etc.) and controlled by several ministries.

The achievements in the implementation of the program are already considerable, shown mainly by the rise of domestic per capita aluminium consumption above 13 kg in 1975, a value equivalent to the average of West European countries, and the highest among the CMEA countries. Exports have been also favourable. Besides exporting a part of the aluminium used in Hungary as end product and components, exports of primary aluminium earned between 1971 and 1975 300 million roubles and 250 million dollars instead of the planned export revenues of 260 million roubles and 160 million dollars.

It is another outstanding achievement that the aluminium shortage was eliminated from the domestic market by the early 70s. The objectives of bauxite and alumina production were virtually accomplished, and also the integration agreements were fulfilled by the parties in compliance with the terms. However, satisfaction of demands for

Table 1

*Main targets laid down in 1970 in the central development program
of the aluminium industry (1000 tons)*

Product	1970	1975	1980	1985	1985/1970 percent
Bauxite	2100	2950	3010	3010	143.3
Alumina	470	780	830	830	176.5
Primary aluminium	65	81	96	96	147.6
Aluminium semi-products	91	160	221	255	280.2
Aluminium castings	18	28	45	53	294.4
Aluminium consumption for industrial finished goods	99	166	249	308	311.1

high quality products and export was impeded by the reduction, or postponement, of certain development targets. Mainly the establishment of the further processing capacities lagged behind the targets from the quantitative and especially the qualitative points of view.

Today we are already in a position to state that the aims had not been exaggerated, however, it was not possible to concentrate the scarce economic resources of Hungary adequately and to the extent dictated by the requirements of selectivity on the branches in need of dynamic development, either in general, or with respect to the aluminium industry.

Since the raw and basic material production phases had to be developed by all means in order to guarantee metal imports, reductions of the development funds that became inevitable in the meantime resulted in lags behind the original targets precisely in raising the standard of technologies and products, i.e. fields that could have added to quality, assortment and exportability (e.g. cast rolled wires and strips, cold rolled plates, castings, pressings, foils). The shortages caused supply difficulties in several fields (e.g. cable wires, vehicle chassis parts, semi-manufactures for use in constructions) and we have to import certain products (e.g. foils) from Western countries. The degree of processing of our products lags behind the planned one, depriving us of considerable export revenues.

The domestic and foreign economic changes as well as shifts in the pattern of use relative to the original state of affairs made it necessary to draw up, at the threshold of launching the 5-year plan for 1976–80, a modified and updated central development program determining the development of the aluminium industry until 1990 instead of 1985. The updated program was approved by the government in August 1976.

In comparison with the original one the new program contains a slight increase of bauxite and alumina production and some reduction of the output of semifinished and finished products, reckoning with our realistic possibilities and with the load-bearing capacity of our economy. The new aluminium smelter of 100 thousand ton annual

Table 2

Accomplishments of the central development program of the aluminium industry

Product	Factual figures of 1975, 1000 tons	Fulfilment relative to the project		Increase of production in percentages 1970 = 100
		1000 tons	per cent	
Bauxite	2890	-60	98	138
Alumina	765	-24	97	160
Primary aluminium	70	-11	86	108
Aluminium semis	143	-17	89	157
Aluminium castings	19	-9	68	106
Aluminium consumption for industrial finished goods	135	-31	81	136

capacity, scheduled for the 6th 5-year plan period (1981-85), is an important new element of the project.

Owing to shifts in relative prices and inflation in the world market the program endeavoured to predict product prices realistically because the conception of the previous program assuming unchanged prices had proved to be erroneous both numerically and in its proportions in the previous five-year period.

It is characteristic of the aluminium industry as a whole as well as of its phases that it is perfectly complying with modern requirements or that further development can bring it to that level in a reasonable time. Despite the medium quality of Hungarian bauxite, our alumina production already corresponds to the top level while our smelting and semifinished production can be made such with the development provided for in the program.

In various industries improvement of the up-to-dateness and marketability of products is effectively supported and influenced by the processing of aluminium. The good properties of aluminium packing material and storage equipment are generally known. Because of its small specific weight and, by contrast, its relatively high strength, aluminium can be used advantageously in construction and in the vehicle building industry. With our domestic endowments the use of aluminium in the electrical industry is almost indispensable. This branch is, and is expected to remain, the main user of aluminium.

Provision of the branch with raw material* plays an important role among the characteristics of the Hungarian aluminium industry. The development of our aluminium

*In the development of a given branch of industry the importance of domestic raw material resources should not be overestimated. Japan, the FRG and Switzerland have neither abundant sources of raw material nor favourable natural or energy conditions, still these countries are among the first in

industry can be based entirely on domestic deposits. Nevertheless, the degree of processing at which the domestic raw material is utilized is not indifferent either. In this field, too, a pronounced improvement of the pattern is specified by the program. In a production process composed of vertically interlinked processes such as the aluminium industry, the degree of processing is measured with an index of "establishment". This is a theoretical value obtained by relating the output of the vertical process in each stage to the quantity of products that can be manufactured from the extracted basic material (bauxite). Thus, for example, the index of establishment of alumina production relative to bauxite production was more than 78 per cent already in 1975, and by 1990 it will approximate 82 per cent. (The deliveries of poorer quality bauxite directed traditionally to socialist countries account for almost the entire deviation from 100 per cent.)

It is typical of the vertical process that the degree of processing can be improved at either stage only by simultaneously increasing the establishment of the preceding phase, so that there should be no need for lasting imports of intermediaries for hard currency. (By the way, imports are not absolutely inexpedient, they can be expressly advantageous on occasions, e.g. in the case of specialization and exchange of products such as under the Hungarian-Soviet alumina-aluminium agreement.) This feature is taken into consideration in the program and the establishment of the vertical process is planned to be increased at each stage simultaneously, in a way that in its course the rate of development of phases implying higher degrees of processing will be more rapid than that of the lower phases. Thus the "establishment" of the aluminium industry's vertical process will be increased on every level: from 43 to 70 per cent with respect to all metal sources, from 30 to 52 per cent in semi-manufactures and casting production, from 25 to 50 per cent in aluminium processing.

The products of the aluminium industry are considered as mostly convertible goods in the consecutive stages of the vertical process (alumina, aluminium castings, semi-manufactures, finished products): these can be sold economically in both the socialist and the Western markets. Therefore, by modernizing the product pattern, the production objective of the central development program has a favourable impact also on the foreign exchange balance of the economy.

Let us review in greater detail the situation of the different phases of the vertical process in the aluminium industry in Hungary, with special regard to the efficiency of development.

the aluminium industry. Intellectual capacity acquired over time and developed continuously, with outstanding bearing on the shaping of the product pattern, played the main part in this development. The creation of such an intellectual capacity (which Hungary also possesses in the aluminium industry) is not a matter of decision but requires lasting and steady efforts.

Raw material basis and production costs of the aluminium industry

Despite the extremely dynamic growth of extraction the known bauxite reserves of the world will secure an unlimited development of world aluminium industry for many decades to come. Moreover, additional aluminium can be recovered from several other aluminium containing minerals and from industrial scrap (e.g. power plant fly ashes, red mud etc.), and despite of their being less economical, there do exist various industrial uses of such processes, e.g. in the Soviet Union for the processing of nephelites and alunites.

The interdependence of bauxite mining, and alumina production does not imply geographic proximity of these activities. The great bauxite deposits of the world are partly concentrated in the industrially less advanced areas (e.g. Latin America, West Africa) or in industrialized countries such as Australia where the deposits and bauxite production exceed many times the needs of domestic processing. Thus the bulk of the extracted bauxite is not processed at the site of extraction but is often shipped to great distances by sea and land (e.g. from Australia to the middle of Europe).

The average costs of alumina production include the mining and transportation costs of bauxite, moreover, the ever increasing taxes levied lately on manufacturers. These and the cost elements depending on the quality of bauxite (caustic soda and in part energy costs), as well as other ones virtually independent of bauxite quality (capital costs and wages, etc.) determine together the profitability of alumina production. Here belong the often considerable costs of transporting alumina to the site of use.

From among the European countries, beside Hungary, only France, Yugoslavia and Greece are in the lucky position of having own bauxite deposits proportionate to their aluminium industries. However, in these countries, partly because of extraction going on for a long time already, the quality of the still available reserves is behind that of the new overseas bauxite resources, and extraction (deep-mining) is much more expensive.

In comparison with the world's deposits, the Hungarian bauxite wealth is not considerable, however it is on a European scale, indeed, and as regards quantity, it satisfies the needs of our country in the long run. It is of a medium quality and the circumstances of its mining are comparable mostly with those of French bauxite mining. The rate of deep-mining is by now about 90 per cent.

One may reasonably ask, whether it is justified to speak of cost advantages or at all, of the profitability of further development of Hungarian bauxite extraction. It is a fact that, owing to given endowments, the extraction costs of Hungarian bauxite are considerably higher than the mining costs at the usually open-cast and concentrated sites, mainly overseas. Nevertheless, the production costs are comparable with those of some European countries producing bauxite (France, Greece, Yugoslavia, the Soviet Union). The rest of the European countries maintain their alumina production mostly by importing bauxite from overseas. Moreover, several "traditional" smelters in Europe were built inside the continent, thus the bauxite bears, beside sea freight, the costs of unloading and overland haulage.

In such circumstances the *economic efficiency* of domestic production is determined in European terms by the relative advantages deriving from the local extraction of

bauxite, from the smelters being near, and from the efficiency of our alumina production.

According to a survey of the Hungarian Aluminium Corporation in 1975, the net production from bauxite of module 8.2, with bauxite extraction and transportation costs, amounts to about 100 dollars per ton (charges on assets not included). The production costs of alumina would increase to about 115 dollars per ton if bauxite of module 15, though much more advantageous but also more expensive than the Hungarian one, would be transported from Yugoslavia or Greece to Central Europe. The processing of a supreme quality African or Australian bauxite (of module 26) with an about 6 dollars/ton royalty above freight would result in net production costs of 150 dollars/ton in the same area, and along the European shore of about 122 dollars/ton.

Approximative calculations show that the alumina production costs of the Western world included in 1975 an average capital cost of \$20 to 21 per ton (time-proportional depreciation, credit charges on capacities created under inflationary conditions) in a way that this cost is practically nil with one-fifth of the producers while it is more than twice the average with new plants. The capital cost of Hungarian alumina production (depreciation, charges on assets and interests of development credits together) is about 15 dollars per ton, i.e. even lower than the said average.

Comparing the two factors it may be stated that relative to the other European alumina producers, Hungary's alumina production shows considerable cost advantages.

Practice has proven that the calculation was correct. In 1975 we exported more than 100 thousand tons of alumina at a dollar price level that returned considerable profits in hard currencies (and in forints) relative not only to the domestic costs calculated in forints but also to costs calculated at world market prices.

Bauxite research has developed favourably during the latest years. The targets of the previous central development program were based on the bauxite deposits known in 1968. As a result of new prospecting work this stock has not diminished despite the quantity extracted in the meanwhile, i.e. the explored new deposits have totally compensated for consumption. The explored and the prospective reserves together are sufficient to satisfy the long-run raw material requirements of a production even exceeding the planned development.

Better results than those anticipated were obtained by recent geological research also with respect to bauxite quality. Part of the reserves earlier considered as prospective has exceeded the predicted quality, and new, promising deposits were also found at some locations. Thus, unlike the previous program, the new central development program could afford to leave the traditional Bayer process without any significant modification. (The previous program, fearing a deterioration in bauxite quality, also provided for the introduction of the pyrolytic process suitable for the conversion of poorer quality raw materials, though it is more costly than the Bayer process.) Thus the development of alumina production (up to the range of about 1 million tons p.a.) is feasible both within and above the basic variant through the economical reconstruction of the existing plants and without building a new alumina factory. This level corresponds to the known quantity of Hungarian bauxite deposits.

Aluminium smelting

The Hungarian aluminium metal production has been increasingly lagging behind bauxite extraction and alumina production, both proportionally and regarding the rate of development. This is illustrated by the following data for the period between 1960 and 1975:

Table 3
Hungarian bauxite, alumina and primary aluminium production

Denomination	1960	1965	1970	1975
Bauxite production, thousand tons/year	1190	1477	2022	2890
annual growth rate (per cent)		4.4	6.5	7.4
Alumina production, thousand tons/year	218.0	267.3	441.2	756.0
annual growth rate (per cent)		4.2	10.5	11.4
Primary aluminium pro- duction, thousand tons/year	49.5	58.1	66.0	
annual growth rate (per cent)		3.2	2.6	1.2

The ratio of domestic aluminium production relative to the aluminium contents of the extracted bauxite was 25.0 per cent in 1960, 23.6 per cent in 1965, 19.6 per cent in 1970, 14.6 per cent in 1975; relative to the aluminium contents of alumina it was 45.4 per cent in 1960, 43.5 in 1965, 29.9 per cent in 1970, and 18.6 per cent in 1975.

The growth of our metal resources could keep pace with the growing demands for aluminium exclusively by force of the cooperation agreements concluded with the socialist countries, mainly the Soviet-Hungarian alumina-aluminium agreement. Under this agreement we receive one ton of aluminium against 2 tons of alumina, equal to the total recoverable quantity of the metal, and the cost of reduction is cleared in current foreign trade turnover. Since 1965 the contracted deliveries have been steadily increasing and in 1980, when full capacity will have been attained, we shall get 165 thousand tons of aluminium in exchange for 330 thousand tons of alumina. The agreement expires in 1985. The Hungarian-Polish alumina-aluminium agreement is another contribution to the growth of the available quantity of aluminium: in return for alumina we import 17,500 tons of metal in the framework of a value-proportionate exchange.

The output of the existing and by now rather obsolete smelters can be increased only to a small extent (from 70.2 thousand tons to 72.5 thousand tons), and there is no international agreement as yet for any increase after 1980 of the quantity of metal shipments laid down in the valid international agreements. Accordingly, the rate of

growth of the quantity of all primary aluminium available for the Hungarian economy will also steadily slow down.

Deceleration of the growth of metal sources produced a situation in which, while the growth rate of the final stages domestic aluminium processing used to lag behind that of metal resources, in the early 1970s this trend reversed. Metal exports to Western countries peaked in 1973 with 76 thousand tons. In 1975 we still were able to export 71 thousand tons of metal but by the end of the 1970s this quantity will have to be reduced in the interest of increasing domestic supply, to 47–48 thousand tons. (Only a fraction of the aluminium used domestically is exported in the form of finished products and this, in comparison with ingot and semi-manufactures exports, does not provide a commodity base of a size that could be exported economically to Western countries.)

According to the long-term aluminium demand prognosticated by the central development program, after 1980 the exportable quantity of metal will rapidly decrease, then for two or three years it will even temporarily cease, moreover, metal imports from Western countries must be reckoned with for a year or two. The program plans to avoid the preservation of such a situation by starting the construction of a new aluminium smelter in 1918. The smelter would yield metal first in 1984 and would run at full capacity by 1986. This would also allow for the continuous reconstruction of the existing and by then badly worn smelters.

At present the alumina produced above the quantity required for domestic smelting and for fulfilment of commitments under agreements, is exported in part to socialist and in part to Western markets. Though the recent convertible currency earnings of our Western exports have undoubtedly developed favourably – owing to the aforesaid cost advantages – yet it would not be appropriate to make preparations for expanded alumina exports to the West in the long run. *Our obvious interest is to process the largest possible part of the produced alumina into aluminium, at home or abroad.* The opportunities of socialist cooperation should be utilized to the maximum in future too, though these opportunities are limited.

The “energy crisis” – which manifested itself primarily in the rocketing oil prices – induced sharp turns also in the market of world aluminium industry. Its consequences have strongly affected, *inter alia*, the comparative economy of the development of Hungarian metallurgy. Aluminium prices adapted themselves rapidly, almost abruptly to the prices developed after the oil crisis and thereby the steep cost increase of about 300 dollars/ton produced by the increase of energy prices and other secondary impacts between 1972 and 1974 was fully balanced.

The *present and future world market price* of aluminium, as well as the trend of prices, is determined by the cost level of the still *significant* exporting producers operating with the least advantageous production conditions, as is the case with other mass products. After the “energy crisis” the aluminium industries of e.g. Japan, Western Europe, and in part of the United States fall into this category, as they obtain energy mainly from power plants based overwhelmingly on imported oil.

Owing to the apparently lasting increase of oil prices, oil-based energy production is no longer considered to be the cheapest source of energy. Thus, the producers using other

than hydrocarbon-based energy suddenly found themselves gaining relative advantages. The effect of the change is at most lessened by the fact that some aluminium smelters obtain energy at a "mixed price" from the national networks, and the national grids of the said zones distribute mainly oil-based energy.

Relatively cheap source of energy has always been an important (but never the sole) consideration in selecting the site for new aluminium smelters. Under the new conditions those locations are preferable where surplus energy to supply new consumers is generated from cheaper primary energy than oil. However, the exploitation of otherwise optimum conditions is strongly limited.

In developed countries using aluminium in larger quantities there is hardly any new resource of hydroenergy or it is very far away (e.g. in the Soviet Union, mainly in Siberia) where the lack of the necessary infrastructure adds considerably to investment costs, and it is also very expensive to transport alumina, the auxiliary parts and materials, and the recovered metal.

The development chances of energy production based on cheap natural gas (accompanying oil) are geographically also remote and are mainly in regions (e.g. in oil producing Arab countries) where the required energy, metallurgical and infrastructural (e.g. water supply) investments and labour are much costlier than the average.

In the production costs of new smelters the proportion of energy cost and consequently its role in determining efficiency is steadily decreasing. The proportion of energy cost in Hungarian smelters approximated 40 per cent in the early 1960's, while in a recently inaugurated US smelter this value is about 26 per cent, calculated at 1976 prices. The shift in proportions is caused partly by the decrease of specific* energy consumption, and partly by the increased importance and rising cost of other factors (e.g. environmental protection). The steadily growing ratio of capital costs accounts by now for more than 40 per cent of production costs.

According to an American expert opinion (Spector, March 1976) the production cost of a new smelter to be located in Venezuela would be by about 6 per cent higher than that of one of equal capacity in the United States (at 1976 prices), although the former project could make use of the available, very cheap hydroenergy (0.35 cents/kWh) in contrast to 1.5 cents/kWh power cost in the United States, assuming identical specific consumption. At the same time the specific capital cost requirement of the Venezuelan smelter would be 19 per cent higher than that in the United States. The same study estimates the difference between the capital requirements of a plant in the Middle East and one in America to amount to 45 per cent, since the first involves substantially more infrastructure building. The cheap Middle Eastern energy price cannot compensate for this difference any more.

The above example and also our calculations show that the economy of production depends at least as much on the specific capital costs as on energy costs.

*The terms specific cost (either current or capital cost) are used throughout as referring to a unit of output.

The comparative economy of Hungarian aluminium smelting has been modified by the changes in international conditions in a favourable direction, as regards further developments. In the early sixties the production cost of electric power generated in mostly outdated Hungarian power plants was almost three times the cost of electric power normally used for aluminium smelting purposes in the industrialized countries applying advanced technologies. (At that time the specific cost of the electric power production was about \$ 0.015/kWh in Hungary, while the aluminium industries of developed Western countries were charged only about \$ 0.005/kWh.) With such relative prices the development of domestic aluminium smelting did not pay. Through the continuous improvement of our energy pattern, the costs of electric power generation have gradually approached those in the developed countries, and in future the economical energetic development based on brown coal of medium calorific value, discovered in Hungary recently in big volumes, as well as on nuclear energy, will offer manifest advantages over manufacturers for whom, in lack of coal, the imported oil will mostly remain the basis of energy production, apart from nuclear energy. One should not forget that most of the aluminium producing countries of the world belong to this latter category. (Nuclear energy is expected to remain more expensive for a long while than coal-based energy, but this type of energy will not be more expensive in Hungary than in any part of the world, consequently it is not likely to bring forth relative disadvantage for our aluminium industry either.)

With respect to coal deposits the development of our energy production is not limited for decades ahead, the limit being the cost of development. The energy requirements of the aluminium industry are often overestimated. In this context it is worth noting that the energy requirement of a new aluminium smelter of 100 thousand tons annual capacity amounts to only 8 per cent of the increment in the performance of the national energy system envisaged for 1981–85.

The smelter, a day-and-night non-stop major consumer, relatively diminishes the costly energy peaks and unutilized off-peak power plant capacities relative to the level of average consumption. Thereby it contributes to the exploitation of the power plants and reduces the average specific cost of energy production. In off-peak periods, only the cost of the consumed fuel is added to the growth of energy production required for the smelter. These advantages of smelters are appreciated all over the world by power suppliers by granting considerable discounts. The most economical way to satisfy the peak energy requirements — with no other solution at hand — is to build peak power plants.

Our position is favourable also as regards the other decisive factor, i.e. capital costs. With the given infrastructural background, costs of industrial investment are, as a rule, competitive with those in the advanced industrial countries. Construction of a smelter in Hungary is, therefore, by all means less expensive than in any of the aforesaid regions possessing cheaper energy. Further additional benefits might derive from proper site selection, expediently near the existing Inota Aluminium Smelter, because part of its facilities do lend themselves for use.

The advantages of a new smelter become even more obvious if examined in connexion with the pressing but otherwise extremely costly reconstruction of the existing smelters (in Ajka, Tatabánya, Inota).

Even our "youngest" smelter in Inota was inaugurated a quarter of a century ago. The several decades old equipment and technologies can no longer be renewed economically. The obsolescence of the plants goes back to two, more and more acute reasons:

- Low productivity, live labour demand exceeding four times the world standard.
- Working conditions so unhealthy that the replacement of labour will soon become unmanageable; the old equipment pollute the environment to an extent not tolerated today by most countries.

Owing to the lag of the metallurgical phase, not only the development of the Hungarian aluminium industry in its complexity falls behind the international standards, but it also slows down the improvement of the know-how already available in this field. This is an obvious barrier to exporting complete equipment and to the exploitation of the attached opportunities of machine exports in big quantities. For this reason we have to import both the most up-to-date know-how and the related most important equipment which account for about 20 per cent of the total capital investment costs of smelter construction; however, this know-how could be used for the modernization of the old smelters as well. According to the program, the temporary setback in output due to the continuous reconstruction of the existing electrolytic cells should be compensated by the growing production in the initial stage of the new smelter, thus eliminating the need for aluminium imports to make up for shortfalls.

Thus, the reconstruction of the smelters we have and the building of the new one are interdependent. As by means of reconstruction not only the technological obsolescence of the smelters shall be ended but, at the same time, a 32 thousand ton annual capacity will be added. Thus, according to the forecast of the central development program for 1990, total metal production will rise above 200 thousand tons per annum which, assuming also that cooperation with the socialist countries will be maintained, will allow not only to satisfy the Hungarian needs but also to continue exporting.

The creation of an up-to-date high capacity aluminium smelter – especially with the given possibilities of our economy – undoubtedly involves considerable capital investment. Yet this investment would, by means of a single, concentrated and well organizable project, create a commodity base exportable to any market of such volume (in the value of 100 to 120 million dollars a year) which could verify the investment not only from the viewpoint of the advantageous per unit indicators, but also as regards the *size and the security* of the achievable result. Owing to the shift in world market price proportions in favour of basic materials which can be assumed to be lasting, both Western and socialist countries wish to lay their basic material supplies on solid grounds, exactly because of the safety and undisturbed development of the processing industries. In the socialist countries this is far from being identical with previous – economically often unreasonable – autarchic ambitions, on the contrary, it is the product of economically established conclusions derived from lasting changes of the

world economic situation and is in compliance with the reasonable principles of the international division of labour. Bearing all these advantages in mind the establishment of the new smelter is scheduled by the central development program for the next five-year plan period, but, as could be seen, any earlier execution would be desirable to reestablish the equilibrium of our balance of payments. Technically it is feasible to complete the smelter even three years ahead its schedule and the value of the added aluminium production attainable this way (a total of 300 000 tons) surpasses the capital cost of the plant.

The practicability of earlier implementation and its coordination with the load-bearing capacity of the economy still need detailed and many-sided analyses and studies.

Potentialities inherent in a higher degree of processing

The quantity of consumed aluminium grows along with the general development of the economy. This course should result in the modernization of the production pattern as well as in the production of the right quantity, assortment and up-to-dateness of products. For this purpose, long-term planning must not set out merely from the required quantity of aluminium and from the present pattern of products, since enhancement of the degree of processing of raw and basic materials is possible only with the simultaneous (and, if necessary, even preceding) raising of the modernness and the technical level of intermediate products and by updating their assortment. (In the case of aluminium, by the term intermediates mainly the so-called aluminium semi-manufactures, the rolled and pressed products and their processed forms, foils, forged and surface treated products, and, to a lesser extent, aluminium castings are meant.)

The total quantity of the manufactured semiproducts has, on the whole, satisfied the needs; the same does not apply, however, for the assortment and quality of products because several intended development projects were put off for lack of resources. Improvement in this field is among the targets of the modified program.

Up-to-date semi-manufactures and finished products can be manufactured economically only in plants with modern equipment, and with modern organization. However, *the quantity of products is increased suddenly and impulsively* by the introduction of a new equipment of high capacity. To avoid that either one should give up the advantages offered by modern major equipment, adjusting to the slowly developing and scattered domestic needs (something that would lead to inefficient and outdated small-scale production), or arrangements should be made for selective development and extensive international cooperation. The first mentioned harmful tendency is unfortunately prevailing in some fields; these must be noted in due time and the necessary measures must be taken. (E.g. such a risk is noted by the program regarding aluminium casting, because at present aluminium is cast at nearly 200 sites, mainly with outdated technologies.) According to the program we have to initiate the development of cooperation, mainly with the socialist countries, in the form of agreements for exchange of products and for specialization, of the type already established in basic material production.

Moreover we have to strive for the direct exports of aluminium semi-products and finished products to mainly Western markets. In this respect the present situation cannot be called favourable: the export of aluminium semi-products to the West totalled 12 thousand tons in 1975, the export of enterprises releasing finished goods to 9 thousand tons. This is not a big sum, and analyses show that they were not always adequately economical either. The characteristic price range of exported semi-manufactures was by 20 per cent, and of finished products (including cables) by 70 per cent higher on average than the sales prices of basic material (aluminium ingots) exported at the same time. This is a very narrow margin. Improvement of the situation is envisaged by the program on the basis of estimates made by companies concerned. Accordingly, the expected sales prices of products processed to some degree are the following (in percentage of the basic material price): aluminium semi-manufactures (wires, rolled, pressed products): 112–140, aluminium cables: 112–130, cast products (export quality): 200–250, aluminium finished products of varying complexity: 200–360 per cent.

The following table composed of the averages of French and in part of British export-import prices in 1973–74 illustrates that the above values are still not satisfactory. (See Table 4)

The substantial difference between the Hungarian and the corresponding West European data is indeed remarkable and calls for thorough analysis. Studies are required to explore the fields where the phase costs of further processing, the additional living and embodied labour inputs, the necessary capital investments are paid off with such export sales prices. This is necessary all the more as the majority of the profit obtained by exporting processed products does not emerge in Hungary in the processing phase, but is the outcome of low-set domestic prices of aluminium basic material and semifinished goods, less by 20 and occasionally even by 50 per cent than the export price converted at the commercial rate of exchange.

On the company level this price difference might occasionally provide ample security to cover losses due to low phase price and higher phase cost, which is in part detrimental on national level from the aspect of national income. On the other hand, it does not show realistically the efficiency differences between basic material production and further processing, and, on the basis of the general economic regulations, it might affect the allocation of development funds unfavourably.

The shortcomings of assortment and quality of semifinished goods do not offer satisfactory explanation for the present situation, since – as seen from Table 4 – there are great price differences also between products (e.g. cables, sheets, tubes, casts) where satisfaction of the quality demands is not an unmanageable problem. On the other hand it is a highly important point that while in the world market the selling and buying prices of basic materials are determined by the product and the person of the manufacturer is nearly indifferent, in turn, with an increasing degree of processing, the reputation of the producing company, the trade mark of the product are of increasing significance and this pushes the qualitatively equivalent but anonymous sellers into the background both as to

Table 4
*Relative world market prices of aluminium
 semis and finished products compared to aluminium
 ingot prices*

Specification	Average relative price (per cent)
Primary aluminium, unalloyed	100
Sheets, strips	
unalloyed	168
alloyed	179
Rods, sections	
unalloyed	138
alloyed	198
Tubes	258
Wires, unalloyed	141
alloyed	145
Cables	184
Semi-manufactures and cables, total	179
Foils, simple	253
finished	276
Finished products:	
doors and windows*	392
miscellaneous structures	
containers, tubes	427
household wares, utensils	514

Ref.: Aluminium (FRG) 1975, Nos. 9 and 11

*Data taken from UK export and import statistics for 1973 and 1974, other data from France's export and import statistics for the same period.

price and marketability. Beyond that, the weakness of export marketing also plays a considerable role in the profitability of exports.

In the exports of aluminium semi-manufactures, castings and finished products lasting market connections favourable for prospective development could be established and the goodwill required for a good price level could be acquired so far to a little extent. Our exports utilize mostly the temporary excess capacities.

Adequate finishing, cultured transportation are frequently overlooked, and our packaging technology is often far beneath the international standards.

A properly weighted sound trade policy is still missing that could actively aid the development of the product pattern by analysing and transferring the impacts and demands of foreign markets, through a more active marketing work. One of the reasons is that several foreign trading companies deal with exports of aluminium products, and thus the production and commercial policies are coordinated and enforced only to a limited extent. The scattered sales mean at the same time that, with one or two exceptions, in the activities of foreign trading companies with otherwise voluminous transactions the ratio of price revenues after aluminium products is small — especially if compared with the work to be expended on it — therefore their concern for achieving higher prices is usually subordinate.

In the long-term planning period ahead of us these shortcomings can be eliminated only if their liquidation is started as early and as resolutely as possible. The means available for development are to be concentrated on the production of a number of leading products, products that sell in any market. High production capacities with modern technologies are to be established, and both technology and products have to be persistently advanced. All that imply and at the same time allow the spread of mutually advantageous international cooperation and specialization.

Experiences have shown that establishment of larger and better organized production and marketing units is the best method to solve our problems. Therefore, it is thus desirable to grant the right of direct foreign trading to the Hungarian Aluminium Corporation, the central unit of the central development program.

*

Summing up, we might say that — in view of both the domestic conditions and the changes in the world economic situation — the Hungarian aluminium industry, together with the attached engineering vertical stages, is one of the fields most suitable for remaining, or rather becoming, our priority-holder *national industry* even in the long run. The updated central development program will help in furthering the already begun selective development aimed at improving the product pattern.

BOOK REVIEWS

ENYEDI, GY. (ed.): *A magyar népgazdaság fejlődésének területi problémái* (Regional problems in the progress of the Hungarian economy.) Budapest, 1976. Akadémiai Kiadó. 254 p.

The collection of essays presents a comprehensive survey of the current theoretical and practical issues of regional development in Hungary. The volume was published by the Publishing House of the H.A.S. to commemorate the 70th anniversary of birth of the recently deceased György Markos. Professor Markos had been displaying vivid and successful scientific activity already before the Liberation of the country in 1945, and in the late forties he was appointed to head the department of economic geography in the reorganized University of Economics in Budapest. As György Enyedi, his pupil and editor of the book, writes in the foreword: "An underlying motive of all the activities of Markos was to serve the cause of socialism. He was guided by this principle also in his scientific activity: this led him to integrate economic-geographical researches with regional planning." – The consideration of practical requirements – a formerly unusual approach – resulted in a complete and up-to-date transformation of economic geography.

With his research work and by generalizing the practical experiences in building socialism, György Markos laid the foundations for the scientific background of regional development policy. Not less significant is his role played in training specialists: a great number of senior executives, scientists, practical planners, instructors in our present socio-economic life are indebted to the polemic, active atmosphere of the Markos-de-

partment for formulating their scientific outlook for the guidelines of their present activities. In the present volume some followers recall the figure of the professor.

Exploring in his study the "level zones" of agriculture with up-to-date methods, the editor singled out, as a basis concept of the memorial volume, the improvement of labour productivity and living standards through the regional allocation of productive forces. This basis concept provides a framework for the illustration of scientific and practical achievements, for the discussion of current economic issues.

In the study Enyedi reveals the regional differences in the level of production, on these grounds he typifies the regions, picks out the most significant determinants with the methods of factor analysis. Beside the interrelationships disclosed by factor analysis the author is eager to find the more deeply rooted – natural, social, economic – motives of the aforementioned phenomena.

It is only through a longer period that regional development activity produces substantial alterations in the regional allocation of productive forces, in shaping the network system of settlements. Similarly, the interdependences between the rates of growth, the structure of spatiality and the national economy assert themselves only in a longer run. The results since 1960 clearly demonstrate the impacts of the spatial structure of the economy upon national economic growth. László Kőszegi exemplifies the above interaction by the regional development of production and investment costs, of the extent of labour utilization, of the exploitation of infrastructure, of living standards and living condi-

tions. The author, in the capacity of a practical regional planner who participated in long-term planning, draws in his study a reliable picture of the working process, its organizational frameworks, character, of the elaborated alternatives, of the even now persisting dilemmas of planners. He outlines the most important attainments in regional development, the strategy to be pursued in spatial approach and in shaping settlement networks, as applied in the stage of long-term planning concluded in the early seventies.

István Bartke and Gyula Bora look into the long-range implications of the regional allocation of the Hungarian industry. They outline the industry's regional structure. In the regional development planning of industry they introduce an own model, which is a variant of the transportation problem with constraints on capacity: it distributes the perspective increase in staff of 61 industries among 112 settlements. The settlements were qualified by supply with 11 resources (quantity and qualification of labour, availability of water, quality of infrastructure etc.) giving them points ranging from 1–5. They then proceeded to qualify industries applying the described location conditions. On the grounds of these two qualifications they determined the points for the settlements broken down by industries (the elements of the cost matrix) in such a way that they subtracted the vector with 11 elements of the industries from the vector with 11 elements of the settlements. The negative elements of the computed difference vector show which of the resources of the given settlement are not in harmony with the requirements for locating the given industry. The sum totals of the negative vector elements broken down by industries and settlements constitute the elements of the cost matrix.

The technical coefficients, therefore, comprise the relative extracost contents of location. The objective function was thus given: minimization of extracosts. Six variants were worked out, each of them describing a single strategy for the location of industry. Technically speaking, they formed the variants by specifying the industrial labour constraints of the settlements (the limits of employment to be followed by the program) in the form of proportions among settlements: industrial employment in Budapest will remain on

level or decrease slightly, industrial development in the country will go on in a concentrated (32 settlements) or deconcentrated (111 settlements) manner, etc.

The authors refer to the constraints of the model, to its linearity and static nature, and to the fact that the model does not express the temporal changes in settlement conditions, in the criteria of the location of the industries, the alterations in the costs of location – depending upon the intensity of the exploitation of resources.

Zoltán Tatai presents in his study a brief, chronological review of the industrialization of agricultural areas. Beside showing the process over time he also points out the driving forces inherent in economic policy and economic environment.

Béla Balogh surveys the development of both the construction and the building materials industry, analyses their regional pattern. His work is a good example how the analysis of regional interdependence can expose significant aspects for the development of individual branches.

László Fodor reports on the results of a research project investigating the Budapest agglomeration. He presents the structure of the Budapest agglomeration and the dynamism of structural changes. On the basis of regularities, input-output relations revealed by regression and trend analysis and with due consideration to the progress in production and efficiency he classifies the industrial groups of the agglomeration. Some of the statements relative to the Budapest or provincial orientation of certain branches touch upon conceptual issues, for example that the input-output analysis of the strategies concerning the development of particular regions has not been improved to this very day. A whole series of studies dwelt on the issues of regional development without really clarifying the actual contents of internal relations.

While investigating the living standards of the peasantry, Viktor Kulcsár outlines in his study all the problems – development, situation in areas with unfavourable natural conditions, bearing of burdens and willingness of the rural population to make sacrifices – which aroused public interest in this domain in Hungary. In the past years several specialists, research workers – in-

cluding the author himself – have been examining the radical transformation of the Hungarian village. Yet it seems not to have been fully clarified, how – for a successful exploitation in practice – agricultural infrastructure essential for modern agricultural production should and can be improved, how the village should be developed, paying due attention to the fact that almost half of the country population lives no longer on agricultural activities. In the study Kulcsár underscores the progress in the supply of the rural population, citing the instance that the improvement of public water supply has grown into a widespread movement, the same way as had been experienced with the electrification of the country, the only difference being the incomparably larger burdens and sacrifices borne by the rural population. He then goes on listing the requirements to be satisfied in order to augment the share of the Hungarian villages in the benefits of the socio-economic and cultural progress.

One of the most important problems of the Hungarian agriculture – agrarian areas poor in natural resources – is treated in the study of Tivadar Bernát. 800 cooperative farms, almost one third of the total number, work at present on such areas extending over one third of the country.

On these areas frequently not even the costs are refunded considering the price system and taxation adjusted to the cost relations of economic units working under average conditions. The non-productive branches and the settlement network alike are here underdeveloped. The result is the accelerating migration of population.

We are now in full knowledge of the concepts based on which plans for the development of farms and for complex regional development are to transform these areas. Specialization (e.g. in cattle- and sheep-breeding in the mountains and hilly regions) soil-amelioration, radical alterations in production structure are needed. All this can, however, be fruitfully executed only if transformations in the production structure are not subjected to employment considerations. In a longer perspective this implies that about two thirds of those employed here should switch over to other jobs within or outside the cooperatives. This is a significant economic and political task in the present as well as in the future.

In his study dwelling on the traffic potentials and average railway-distances between major settlements (130 major, more significant settlements) Csaba Kovács furnishes valuable information primarily for transport experts.

The study of György Zala introduces – mentioning the regional development of the Southern Transdanubian Region – the socio-economic position, the opportunities for further improvement of the economic-planning region formed by the countries Baranya, Zala, Somogy and Tolna, and offers proposals for the perspective trends of regional development.

László Lackó writes on the mapping of economic spatial configurations.

This collection of studies is of much interest for both theoretical and practical experts.

GY. WIRTH

BENET, I. – GYENIS, J. (ed.): *Economic studies on Hungary's agriculture*. Budapest 1977. Publishing House of the Hungarian Academy of Sciences. 194 p.

The book, a collection of nine studies, is an attempt to give a comprehensive picture of Hungary's agriculture – as István Friss, a member of the Academy states in his introduction to the book.

Part One of the book examines the diverse factors of agricultural production. The author of the first study, Antal Ernő Tóth, analyses the correlation between industrial development level and the shares of different production factors (labour machinery etc.) within agriculture, with special regard to the use of living labour.

The data show, the author affirms, that the share of living labour has been steadily diminishing in highly developed countries since the 1950's. In this respect the socialist countries – thus also Hungary – came near Western countries only as late as the sixties.

In the period between 1938–1965 agricultural area was decreased in most developed countries (except the USA, the Soviet Union, the UK, Bulgaria, Yugoslavia). However, output value per hectare of agricultural area and per agricultural earner (intensity and productivity, re-

spectively) were rising to some extent in each of these countries. It is equally fair to state that productivity has become a prime concern even in less industrialized countries.

Nevertheless, much effort is still needed in Hungarian agriculture to raise productivity. This necessitates first of all a sharp increase in mechanization and chemicalization (in 1965 Hungary occupied a medium position as regards both its share and the rate of growth).

Large-scale farming in Hungary favours mechanization and the application of labour-saving technologies, thus the increase in productivity. Yet in the author's view, agricultural policy should rather give priority to increasing the yield per hectare, as, in the long perspective Hungary is more likely to succeed with labour-intensive products on the international market of agricultural products.

The author of the second study, Gábor Szabó outlines the land reform of 1945–1947 and the socialist transformation of agriculture completed by 1962, and then goes on to discuss the current issues regarding the utilization of agricultural areas. The total cultivated area of the country decreased by 2.25 per cent between 1950–1970, yet there was a positive shift in the inner structure of the branches of cultivation in favour of fruit-growing and, to a lesser degree, forestry. The picture is alas less promising concerning soil conditions, the restoration of plant nutrients in agricultural areas. Despite the recent growing utilization of fertilizers, Hungary is still lagging far behind by international comparison.

Later on the author dwells on the valuation of agricultural land. In recent years this issue has often been the bone of contention of the economists in socialist countries. In order that lands could be assessed in terms of money, land taxes should be levied on an objective basis, productive factors should be allocated optimally among the branches of the national economy and the production potential of agriculture should be appraised more completely. Having outlined different opinions, the author concludes that land tax should be based on net income in state-owned farms and on gross income in co-operative farms.

Zsuzsa Orolin examines in her study the labour supply in Hungarian agriculture and the

structural changes in manpower. The rapid industrialization of the country was continuously absorbing manpower from agriculture, migration was excessively high in two distinct periods (1949–1953 and 1958–1962), namely, in the years of collectivization. This process was reflected not only by the decrease in the absolute number of those employed in agriculture but also by significant changes in the composition by sex and age. The proportion of females working in the cooperative sector exceeded 50 per cent, with the average age rising from 40.8 (1958) to 53.1 (1970) in the meanwhile. The “ageing” of agricultural population has more and more urged further mechanization. The high share of mostly unskilled women put a brake on this process, but stimulated labour intensive production methods.

From the late sixties on the progress of Hungarian agriculture took a more favourable course in which the welfare policy measures of the state played a major role. The incomes of the peasantry were constantly rising, the proportion of qualified manpower composed principally of younger persons was on the increase. Therefore, now as well as in the future the gradual re-grouping of a part of the agricultural labour force into other branches is and will become an ever greater necessity.

Agricultural employment decreased by about 40 per cent between 1950–1970, whereas production increased by almost 50 per cent – the author of the fourth study, Iván Benet, writes. The increase in production was mainly due to a simultaneous nearly 2.4-fold increase in fixed assets. From the sixties on agricultural investments have been growing at a fairly rapid rate, reflecting a more realistic recognition of the role of agriculture in economic growth. However, the greater part of investments served for replacement and substituting (construction of buildings for animal husbandry, new machinery and equipments) because of a sharp decline in the number of draught animals and out-of-date buildings of small peasant farms. This explains why the proportion of net investment, that is, of investment resulting in actual expansion of productive capacity, is extremely low in agriculture.

The agricultural capital/output ratio was characterized by a rising tendency in the period under observation, chiefly as a consequence of switch-

ing over to mechanization, "industry-like" production. The author maintains that this increase will culminate some time between 1980 and 1985.

Part Two of the book concentrates on the relations of production in the Hungarian agriculture. In the first study Béla Csendes outlines the salient features and main types of socialist cooperatives.

Every cooperative is based on group ownership and is self-governed. Their activities are controlled by the socialist state partly through economic instruments, partly through laws and partly through direct state supervision. A characteristic of cooperatives is the collective material interest of the members, thus the main instruments of state control are the regulation of incomes, the system of creating funds and taxation. The establishment of the prescribed funds (depreciation, sharing, development, welfare, educational and income-security funds) guarantees rational management. The reform of economic control in Hungary in 1968 started radical changes in the management of agricultural cooperatives by allowing activities belonging to the "food-block" and even certain industrial activities.

The economic reform thereby created favourable conditions for building up and spreading cooperations in the "food-economy" — Magda Csizmadia writes in the next study. Within the food economy economic relations may range from the simpler or more complex cooperation in procurement or marketing to the most advanced forms of vertical integration through various federations and associations. The author underlines that it is wholly mistaken to conceive vertical integration as the only form of cooperation.

Antal Ernő Tóth investigates the place and role of household plots and auxiliary farms in socialist agriculture. He finds that these auxiliary activities play a major role in Hungarian agriculture by way of cultivating such existing productive branches and areas as cannot be used economically in the framework of large-scale farming, and by employing hitherto "untapped" labour reserves (housewives, persons with "double" occupation etc.). Over and above their own consumption household plots and auxiliary farms produce for sale to a marked extent, thus taking

a big share in the food supply of the country. Acknowledging their importance, collective farms tend to support them more and more among others with fodder and machine power.

Further on in the book János Gyenis treats a less significant type in the Hungarian cooperative movement, the so called "simpler cooperatives". Such type of cooperatives came into existence primarily owing to natural endowments dis-favouring large-scale farming, chiefly in traditional fruit- and vine-growing regions. A feature of these cooperatives is that their lands are individually cultivated, and cooperatives back them mainly by securing chemicals, machinery and means of transport. Apart from fruit- and vine-growing, the significance of these cooperatives is negligible. Because of their special position their future seems to be well-justified even on longer-run.

In the last study Miklós Hegedűs deals with the main trends and changes in the structure of the food economy. After a historical survey of economic progress he analyses the present situation. According to traditional output indicators agriculture has a decreasing weight in the creation of national income, employment etc. Yet on the basis of these indicators the proper place of agriculture in the national economy cannot be adequately assessed — the author says — as the food economy is establishing production and exchange relations of an ever widening scope with industries as a purchaser of means of production and with other activities, as well, and it is highly expedient to consider them when evaluation is made. The weight of the thus created "agrobusiness" is already highly significant. In 1968, for example, 49 per cent of all those employed worked in the field of "agrobusiness".

The trend of the past twenty years is likely to continue in the next 10–15 years — the author maintains. The share of the food economy will continue to fall, the share of labour engaged in agriculture will drop from 29 per cent in 1970 to 12–14 per cent in 1985. The proportion of agriculture in the total output of the food economy will decline. Since domestic demand for food and food exports will increase, hectare yields and the productivity of living labour will have to be dramatically improved.

The collection of studies, as a whole, offers valuable contributions to a better knowledge and understanding of some specific problems in the Hungarian agriculture. It is an attempt at drawing a comprehensive picture of various areas in the Hungarian "agrobusiness".

A. TÓTHFALUSI

HOFFMANN, M.: *A magyar háztartások gazdálkodási modellje* (The model of household management in Hungary.) Budapest, 1977. Közgazdasági és Jogi Könyvkiadó. 355 p.

The author describes Hungarian households in her book, relying not only on data available from the statistical publications on household budgets of the Central Statistical Office but also and more massively on her own data-assembling. Assisted by more than 100 undergraduates as interviewers she observed 1650 families. The bulk of information goes back to the years 1973-74. During the research work she was interested in both quantifiable and verbally descriptive criteria, therefore she calls her model of the Hungarian households an empirical-verbal model. Her research utilises contributions of more or less related scientific disciplines: statistics, economics, sociology, psychology, mathematics and computation techniques.

The introduction and Chapter I look into the main issues of the economics of consumption. They seek for theoretical support to select factors influencing consumers, attitude in the model. A whole chapter is devoted to micro- and macro-level factors which determine consumers' behaviour. Although, despite separation, these factors tend to blend, the main concern of both chapters is with the interdependence among incomes, prices and consumption. However, the ensuing statement, that these factors are not yet sufficient to describe consumers' behaviour, is of great importance for the model. Buying - the author says - "is the penultimate phase of a series of decisions affected by several conditions." (p. 63)

From among the great many factors bearing upon the Hungarian households she selects 16 characteristic parameters for the model:

1. family size; 2. income level; 3. pattern of outlays; 4. stock and age of durable consumer goods; 5. the amount of discretionary income; 6. the amount of savings; 7. value and type of products bought at first sight (impulse buying); 8. housing conditions; 9. willingness to buy on hire-purchase; 10. possession or lack of a car; 11. saving habits; 12. nature of procurement plans; 13. the way of income allocation among different uses; 14. pattern of managing cash income; 15. nature of pre-purchasing decisions; 16. advertisement-absorbing capacity.

The author selected, explored and tried to quantify significant factors hitherto rather neglected, endeavoured to approach them numerically and verbally, thus markedly contributing to a better knowledge of household management in Hungary. At the analysis of practically each parameter one can come across an exciting statement.

The author examines the fashion of household management many-sidedly. Economizing on their cash incomes are those households, she maintains, that put aside a fixed monthly sum in order to realize their investments. They amount to a mere 14.2 percent of the households. The majority saves up only as much as remains, and usually less than those economizing in a planned manner. Consequently, saving is as a rule unplanned, yet a remarkably high percent of households plan their outlays, on an actually high level of family democracy, that is, family members jointly.

Though the survey does not touch upon consumers' price sensitivity, it nevertheless remarks the high proportion of low-valued products (Ft 140-340) in connection with impulse-buying (products bought at the first sight), impulse-buying of high-valued products, i.e. above Ft 2000, being practically nil.

When studying sensitivity to advertisements the author arrives at the conclusion that Hungarian households estimate advertisement overwhelmingly negatively, and are apt to take rather the direct advice of sales personnel than that of advertisements. The motive of listening to sales personnel is his assumed expertise, while with TV and shop-window advertisements it is the comfortably perceivable information, and the orientating function, respectively, that are highly valued.

On investigating the procurement plans of households and their implementation, the author concludes that in 1973 67% of the Hungarian households envisaged high-value investments. The procurement plans were greatly influenced by the level of the stocks of durables. In the better equipped households the procurement plans concentrate around travelling, the flat, furniture and the private car. In the country towns TV-sets, refrigerators and renovation still play a major role, but demands for travelling and private cars have also started to rise. In villages travelling is less significant, but demands for conveniences and private cars are also rising. 60 per cent of the procurement plans is envisaged as purchases for cash.

Procurement plans depend – over and above the level of stocks and incomes of their makers – on the age of their planners, too. Thus, for example, the plans for flat-procurement have an especially high share with young persons. These procurement plans testify to impatience and go sometimes beyond the boundaries of reality as is proven by their relatively meagre, 49 per cent ratio of implementation. The non-realization of procurement plans is due, with a frequency of 58 per cent, to the insufficient amount of cash, 14 per cent bought other things than planned, 10 per cent indicated family problems and only 4 per cent mentioned the deficiency of supply.

The last chapter of the book treats the applicability of the model partly in the corporate, partly in the macro-sphere. In the authorities view, from among the parameters of her model companies may make considerable use of the relationship between the stock of durable goods and plans, the nature of payment terms and prepurchasing decisions, the relation between sensitivity to advertisement and impulse-buying.

The author makes an interesting and noteworthy comment on the fluctuations in the sale of some durable consumer goods, saying that they are more due to the age-distribution of the stock than to income-level as is shown by the examples of TV-sets and washing-machines.

The author quotes from the literature some useful ideas for the application of the model of household management in the macro-sphere.

É. RADNÓTI

ELIASSON, G.: *Business economic planning – theory, practice and comparison*. London–Stockholm 1976. John Wiley & Sons, Swedish Industrial Publications. 324 p.

In the book “planning (is) described as an ex-ante rehearsal of the macro decision process that controls the entire business organisation” (p. 23). The author interpretes macro decision as the analysing, controlling and implementing activity of Corporate Head-quarters (CHQ). Interviews with 30 US and 32 non-US companies (out of which 16 are Swedish) served as an empirical background. The companies were multinational ones employing from 5000 to above 100,000 persons. The interviews were made in 1969–70, though in a few cases they extended over the economically contradictory years of 1973–74. Planning is already regarded at the companies under study as a top-ranking activity. Planning on executive level falls within the competence of the Vice-president of Finance or the Comptroller. Its principal fields are selling and market strategy, the planning of profits, prices and costs and the monetary policy and investment projects of the company.

The experience gained at more than 60 companies suffice to confront practice with theory. In the literature the organizational technique of planning is more profoundly dealt with than management theory. Without an adequate theory, nevertheless, numerical technique is devoid of contents.

Some of the authors regard corporate planning as a precondition for market success. This attitude leads to the formation of profit centres inside the company. The task of CHQ is to define the activities of profit centers and to spur and control them while implementing the objectives.

Theory sets out from the fact that planning specifies business long-run targets and determines accordingly short-run objectives. Consequently, an element of planning is forecasting, the other the budgeting of implementation. Because of the incessantly changing economic environment contingency planning is needed to reduce risks by increasing corporate elasticity.

The aim of planning is greater efficiency. Western specialists conceive it on company level and

aim at boosting turnover and profits and raising the efficiency of the underlying technology, information and coordination. Corporate planning is effective with resources allocated, if there is a minimum profit requirement and a suggested plan of operation. For the information necessary in decision-making to be eligible from the over-abundance of irrelevant ones decentralization in planning is necessitated. CHQ may aspire to overview the essential factors in this decentralized, profit-centered organization with the aid of a master model.

While investigating the practice of the 62 companies Eliasson points out that the starting point of the CHQ master plan is the good knowledge of market environment. The market potentials of established and new products are examined separately. Profit targeting and forecasting the effects and determinants of market and corporate factors which affect profits serve as the basis for the plan.

Market potentials restrict short- and long-term financing, the amount of working capital and investment available. The financing plan of CHQ is eager to raise corporate funds with corporate economic autonomy remaining intact.

The most interesting part of the study looks into the role and opportunities of planning as an intracorporate organizational force. A central indicator of CHQ planning is profit. The profit target can be bold or moderate, more or less favourable than in the past, in keeping with market potentials, satisfactory considering inflation, realistic by comparison with units within the company, propitious after matching the alternatives, indicating stagnation or growth on the grounds of long-range effects – investment – etc. Weighing these dimensions implies to a certain extent a stand what regarding the role the CHQ sets before itself concerning corporate control.

Corporate plans in Europe refer usually to shorter periods, American companies endeavour to integrate operational (annual, quarterly) plans with long-term ones (5 year or longer). The aim of planning is to secure corporate elasticity under changing conditions. To this effect continuous planning is applied. The organizational power of plans is invigorated by the system of management participation, responsibility and reviewing. In this

way future targets and future decisions are easier in find for CHQ.

The author makes the review of corporate experience more vivid by introducing schemes, decision flow charts and formalized planning models.

By confronting the literature with the observed corporate practice the author arrives at some conclusions concerning the theory of firm behaviour. He opines that – in contrast with theoretical concepts – firms seek to maintain or improve performance (MIP) rather than optimization. On this basis he formulates four hypotheses. The basic hypothesis refers to the firm behaviour assumption. Considering given environmental conditions the firm plans in agreement with the MIP principle. Inasmuch as the objective anticipated by CHQ is to be attained, slack is allowed. The environmental hypothesis sets out from the assumption that in orientation under unexpected future situations “the human mind is foremost” (p. 242). According to the third hypothesis CHQ planning is an internal cohesive force of the firm. “Comprehensive planning works best in a repetitive environment... differentiated products and many markets mean instability (non-repetitiveness) between the parts of the business organization” (p. 242). The fourth hypothesis says that there cannot be formal long-term planning, especially plans for the efficiency of new products, technologies and related investments. Taking all this into account the author asserts that “goal formulation for the firm organization as a whole is a top CHQ matter.” (p. 250) The basic motive of corporate growth is “extra economic benefit from team production” (p. 256) founded on the MIP principle.

The book offers a deep insight into the mechanism of capitalist corporate planning and management. Its final conclusion, that under the uncertain conditions of capitalist market the application of the “maintain or improve performance principle” is required, seems wholly justified. The chances of corporate planning are obviously more favourable in a socialist economy, where planning pervades the entire economy inclusive of the macro-level.

I. GERGELY

KÁDÁR, B.: *Latin-Amerika növekedési dilemmái* (Growth dilemmas in Latin America.) Budapest, 1977. Közgazdasági és Jogi Könyvkiadó. 342 p.

Béla Kádár's latest work discusses highly exciting and topical issues that might be of interest to readers not particularly familiar with Latin-American problems as well. Namely, the problems in the countries of the continent, their diverse economic-policy and development concepts, their position in the world economy feature several historical characteristics "which are retraceable, to some extent, in a modified form, also in the economic growth of Central- and East-European countries, or at least in certain periods of it." (p. 7)

The book falls fundamentally into two parts: first it presents an overall view on the main trends in Latin-American development, on the changing and relatively declining position of the Central- and South-American continent in world economy, on the stages of economic growth, on the sub-regional peculiarities of these stages, on foreign trade, financial and capital relations. In this context the author proceeds to dwell on endeavours to form regional and subregional economic integrations (Latin-American Common Market, Latin-American Free Trade Association, Common Market of the Andes).

The second part of the book recalls the failures and successes of the more prominent Latin American countries (Argentina, Brazil, Columbia, Peru) in developing their economy in specific ways. However, in this context we disapprove of the omission of Chile and Venezuela. Though it may be true that the patterns of economic progress in the two countries have been affected by extremely exceptional and diverse factors in the last five years, yet these changes have much influenced the balance of power within Latin-America and have augmented considerably the economic and/or political significance of these countries.

The divided structure of the book is no doubt relative: in the general part the specific problems, socio-historical particularities of the more thoroughly investigated countries (especially of Brazil) are discussed. Particularly interesting is the first chapter, which treats the phases of evolution starting from the precolumbian era.

The author analyses several of the socio-historical peculiarities of Latin America in those countries where those peculiarities manifested themselves more pronouncedly or deviated from the general trend. It seems thus justified that the author expresses his views on the socio-economic functions of Latin-American armies precisely in connection with the specific actions of the Peruvian army. Generally speaking, the structure of the book is fortunate and makes orientation easy for the reader in the vast complexity of information.

The author's guiding principle pervades the whole book: the successful progress of the Latin-American region located on the outskirts of the world economy and of the individual countries of the region is measured by how developed and differentiated their economic and foreign trade structure is, how they are integrated into the dominant regions of the world economy, into each other and other peripheric regions. This apparently normative aspect is applied by the author with due consideration for the real economic-geographical and socio-historical conditions and potentials of the individual countries. His explanation will be convincing in view of the opening of the Latin-American economic policy towards an export-oriented industrial development and export diversification in the course of the past decade as a direct consequence of the exhaustion of the formerly overdriven import-substitutive industrialization.

He then ranks the economic policies of Latin-American governments according to the failures or achievements of the expansion policies with the aim to boost a diversified, structurally more complex, and advanced export. Colombian, Mexican and Brazilian examples undisputably demonstrate the success of this policy. In contrast, the absence or late, inconsistent and irresolute launching of export-oriented expansion results in dire consequences: the lessons of the author's study drawn from the experience of Argentina point beyond Latin-America or the whole group of developing countries, and serve as a deterrent for practically all national economies geared to world economy, that is, for the overwhelming majority of the national economies of the world.

But in the meanwhile Béla Kádár lays stress also on the point that "The emergency in some

of the Latin-American countries resulting from the exhaustion of import-substitutive industrialization would not, in itself, have warranted the success of switch-over if trends favouring export-oriented industrialization had not emerged in the international economic and political environment." (p. 82) Of these the most important was undoubtedly the incipient relocation of labour-intensive industries which were escaping from the rising cost inflation in capitalist countries beginning with the late sixties. The continuation of this process is of great significance for the host countries since in the meantime other changes in the world economy, e.g. the price explosion in 1973, affected several major Latin-American countries adversely, particularly the unstable trade balance, machinery-importing capacity and thus the growth prospects of the strongly export-oriented Brazil. The studies of the book, in particular the analysis of

the Brazilian, Mexican and Columbian situations give rise to the conclusions that expansion and export policy adapted flexibly to market potentialities obtain increasingly higher significance amidst a slowed down world economic progress. This can be complemented by increasing import-saving raw material and energy-generating capacities exclusively in countries with ample and economically exploitable resources (Mexico, Brazil).

The principal lesson for economic policy from Béla Kádár's Latin-American studies is that the relative autonomy and further growth prospects of medium-developed small economies can be maintained only if they develop a flexible export-pattern which truly reflects changes in world economy and the potentialities of the given economy, and if they gear their economic policy to constant structural development and improvement.

GY. BECSKY

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*We acknowledge the receipt of the enlisted books. No obligation to review them is involved.

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