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J. FÁY–R. NYERS

SPECIALIZATION AND COOPERATION IN THE HUNGARIAN ECONOMY AND THE CMEA

In the paper submitted for discussion to the Conference jointly organized in November 1980 by the Institute of Economics of the Hungarian Academy of Sciences and the Institute for Business and Market Research the authors analyzed the state of specialization and cooperation as developed in Hungary and the CMEA. The present article was prepared on the basis of this paper. The authors state: as compared to her foreign trade relations, the process of international specialization is less developed in Hungary. One reason for this is the unsatisfactory level of international specialization which can be attributed to the divergent nature of control from that of the organizational system rather than to deficiences of price and financial regulations. It is also disadvantageous that the whole system of goals of economic control and management (planning, control, preference scale of incentives) is linked to the demand structure of financial use ("end-product orientation"). As far as CMEA cooperation is concerned the authors emphasize: we have to set out from the fact that in most member countries the international economic mechanism do not promote, moreover hardly permit, the initiatives and independent action of enterprises in the field of international specialization and cooperation. The basic aim of participation in cooperation can only be the national economic efficiency, and optimal efficiency at the community level can only be approached through the former.

Specialization, cooperation and their deficiences in Hungary

In a period of intensive development of the economy new forms have to be found and exploited for increasing efficiency. The international specialization of production and cooperation is a source through the expansion of which labour productivity can be increased at faster rate, capital output ratio can be reduced and it becomes possible for national economies to realize comparative advantages in the international division of labour. For Hungary it is of vital importance to exploit this source as much as possible.

It is not always recognized and acknowledged that in the field of specialization and cooperation the international process is in interaction with the domestic, internal economic processes, moreover, every individual process overlaps another one and a specific type intertwining emerges. This involves that international cooperation cannot be developed rapidly if producing organizations are unable to expand domestic cooperation at a similar rate.

It is remarkable that in Hungary – just like in the other CMEA countries – a specific international cooperation, "overdue" in a certain sense, was put on the agenda in

the 1970's and has remained there also in the 1980's. We have joined more seriously the international trade in technical-scientific products only late, at the end of the 1960's. In the process of industrialization a type of enterprise had become dominating which was inward–looking and tried to establish a possibly closed production process. As a consequence, the already established production patterns, fixed assets, and labour force rather "resist" the subsequent expansion of specialization and cooperation. This difficulty should be kept in mind but we have to be able to overcome it.

It is a Hungarian paradox that while our foreign trade relations are developing remarkably, the process of international specialization is hardly developed. For example 53–55 per cent of investment in machines and equipment in the industry derives from imports, the same share for agriculture is 60 per cent, for construction more than two thirds. Despite a perceivable expansion of international production cooperation over the last five years its share is still moderate. In 1979 a quarter of Hungary's CMEA trade and 7–8 per cent of Western trade were transacted on the basis of long-term cooperation agreements. These connections were accompanied by technical progress and improved at the same time our trade positions. According to estimates they proved to be factors improving the balance of trade both in rouble and dollar relations, consequently their development is important for two reasons.

Among CMEA countries Hungary develops this kind of relations especially with the Soviet Union, the GDR, and Poland but even these lag behind the desired level. In respect of the other CMEA countries a greater degree of dynamism would be required. Cooperation connections with the Western countries were novel phenomena in the 1970's and they attracted much attention; still they are in their infancy, thus we have to develop them intensively. It happens that international cooperations developed in the two directions frustrate each other, but the much more frequent case is the opposite, when one promotes the other. A special emphasis should be laid on CMEA connections also in this field but not in the sense of trying to narrow down production cooperation outside the CMEA artificially.

Elimination of the external and internal equilibrium problems of the Hungarian economy in the long run, and a permanent and satisfactory rate of growth are feasible only if we succeed in shifting the whole reproduction process to a new path where international efficiency is the main criterion and along which the international competitiveness of the economy can be increased. Further progress is required along the road which the Hungarian economy took with the implementation of the 1968 reform of economic control and management. The most recent measures taken to modify the control system and making it less differentiated aimed at a more consistent implementation of the reform.

It seems that the incentives reflected in prices, relative prices as well in incomes policy and the present system of financial management, "pull" nowadays already to a great extent towards increasing efficiency and international competitiveness. This "pull" can be further increased by improving and developing the system of monetary instruments.

From theoretical considerations and empirical evidence we have to come to the conclusion that the mechanism of economic management is not yet complete in Hungary and, in consequence, the influence of planning and regulation is limited in certain fields and is rather weak in practice. Mainly the following things are apparent: readiness to innovate is unsatisfactory, new activities are limited to narrow fields, modern products and production processes gain ground slowly and outdated ones are being superseded very slowly. Organization is at a low level in the production and trade cooperation of enterprises, quality is a secondary matter, rhythmical production is neglected, and superiority originating from monopolistic position is frequently enforced. Response to market impulses is definitely improving but this manifests itself primarily in the manoeuvring of enterprise centres; the producing units hardly join in the marketing.

The above mentioned deficiencies can be attributed to the contradictions originating in the divergent characters of the price and financial regulation pointing nowadays already in a progressive direction and of the existing organization system.

Elaboration of long-term directives for the further development of the organization system of the Hungarian economy, still requires much effort from those working in the sciences and in economic management. While exploring the direction of long-term development, we have to introduce those changes in the system which are obviously reasonable and are in accordance with our present timely tasks. Weighty reasons speak for assigning an outstanding role to those ideas within the host of principles and view-points which promote the expansion of specialization and cooperation in the framework of a system which simultaneously induces and allows the deepening of cooperation.

Expansion of specialization and cooperation within a country is closely connected with the extent and manner of participation in the international division of labour. With the present and future size of the Hungarian domestic market an adequate economic background for the evolution of these efforts can be ensured only through increased integration in the world economy and, within this, in the CMEA. The set of external conditions of economic cooperation with the socialist countries and the rest of the world and the aspects of harmony with them, constitute another important facet of our problem.

Before discussing interrelations with the internal and external conditions in detail we shall make a brief attempt at describing the economic advantages offered by increased specialization and wider cooperation.

Economic advantages of specialization and cooperation

In the most general formulation this is an extension of the principle of division of labour to a new field of the reproduction process. This is justified and necessary because the extent of specialization in the Hungarian economy lags much behind the level required by the exploitation of today's modern technical knowledge to ensure the international competitiveness of products, services and production processes. The same is characteristic of the whole CMEA region.

Expansion of the division of labour, the deepening of specialization can be interpreted not only for the whole reproduction process but for its every individual sub-phase too. Thus, for example, for the preparatory process preceding investment and production with its general and trade-specific vertical production and semifinished product lines; as well as for the diversified tasks of selling comprising in itself market research and development of the trade network. The division of tasks among international partners can come about everywhere, where technical-economic implications make it advantageous, also in the individual parts of the process of development, production and selling, in such a way that every participant undertakes the element he can perform most effectively. National-level economic efficiency can be the decisive criterion.

Facts indicate that innovation in Hungary is not "fed" to the necessary extent with the import of technical-scientific products. It is true that the import of know-how has increased twice as fast as the import of goods over the last years (1975–1979), but its effect is too small to ensure the necessary renewal of the production pattern. In the whole industry the share of products produced under licence had increased in the total value of sales up to 1978 to 4,7 per cent. The same share for the engineering industry is 8,1 per cent, it is increasing dynamically in metallurgy and the chemical industry, while its role is insignificant in the light industry and the food processing industry. The pattern of the Hungarian import of scientific products is unique: 70 per cent of technical designs connected with investment is imported from socialist countries, 90 per cent of licences from the Western countries. The point is that this all is insufficient, although sometimes it looks more than it is.

After all it is the production process where the international competitiveness of the economy and its organization in the spirit of a wide-scale specialization are basically determined.

In principle – in an approach aiming at maximum efficiency – it is reasonable to operate such production units which perform as many work-processes in which, by the help of the most modern technology, they are able to achieve the world level of productivity and the same standards in the output of products, semi-finished products and services. In this order many semi-finished products, parts and units are supplied by a network of outside suppliers, which operate also on the principle of maximizing productivity.

An opposite extreme – which maximizes the external independence of the enterprise producing the end-product – is the production of complicated end-products in quite small series in such a manner that every individual component and every part or unit is produced within a single enterprise in a series required by the end-product.

In reality the extent of specialization in the production processes of the individual countries moves between these two extremes. However, it is not indifferent which extreme it is moving away from and which one it is approaching.

In order to illustrate the decisive influence the extension or contraction of cooperation can exert on the development of efficiency and international competitiveness, let us quote here the findings of two surveys.

According to computations of Soviet specialists, the CMEA level specialization in the production of components, parts and units the Soviet engineering industry would permit the following economies as compared to the indicators of the present complete vertical production: research, designing and technological works preceding production could diminish to one third-one fifth, the labour input embodied in investments to two thirds, the live labour input to two fifths-one third. Beyond this, the speed at which new products are released could be 1,5–2,5 times the present one.

The second example is from the Western world. The West-German Volkswagen Works have prepared an analysis of the more and more apparent lag in the competition with the Japanese car production and the main underlying factors. According to analysis, taking a passanger car of medium category with identical technical parameters, Japanese productivity is 60 per cent higher and the level of unit wage costs 50 per cent lower. These great differences are attributed by the analysis to two main factors: 1. in the Japanese car factories only 25–30 per cent of the total value of the car is produced by the factory itself, the rest is purchased from about 8000 specialized outside suppliers; 2. in the Japanese factories the level of automation in the final assembly is much higher. It has been calculated that the Volkswagen Works could save some 200 million DM only on storage costs, if the share of cooperating partners in production were increased to a level similar to the Japanese one.

After the above examples perhaps we might try to enumerate somewhat more precisely and in a greater detail the potential economic advantages offered by an expansion of specialization and cooperation.

The establishment of enterprise production lines in such a manner that the productive activity comprises a relatively smaller number of work processes could

– promote the introduction of high productivity modern equipment and production processes and, through this, the growth of productivity and the reduction of unit costs;

– make the organization and control of the production processes simpler and better arranged, by expanding the application possibilities of modern methods of shop management and control by computers;

– make the strategy of applied scientific research and the purchase of foreign licences and know-how concentrated so that the adaptation of new technology could be grouped around product lines applying homogeneous production processes and moving in a narrower technological zone;

– contribute to a more even exploitation of machine capacities, to reducing the frequency of production switch-overs and in connection with this, to the reduction of losses in the use of raw materials and energy;

– contribute to the improvement of technological and labour discipline through a stricter organization of production processes in closed cycles and a more marked realization of material incentives connected to individual performance;

– reduce the, in many cases confusedly wide assortment of products and semi-finished products to be stored by the enterprises and also the connected storing losses;

– promote "expansion" of the staff with deeper professional knowledge and special professional experience and make professional orientation more unambiguous in the educational qualifications;

– improve the processing quality of finished and semi-finished products supplied by the enterprise through the application of modern means and methods of quality control permitted by the modern processing technologies and also through an easier spotting of possible mistakes ensured by the small number of work processes;

– introduce, with the help of spreading mutual supplier connections, stabilizing elements of significant effect into the sphere of international sales and purchases and promote the exploration of mutual interests concerning the transfer of technology;

– ensure, as a trend in economic organization, more favourable development opportunities for small and medium-size plants and thus contribute to the mobilization of labour reserves still existing in the various sectors of the economy (for example in agriculture), to a more intensive confrontation of employees in smaller groups with the requirements of external and internal markets and, last but not least, throught the promotion of market adjustment to an increase of elasticity in the regrouping of products and the means of production.

This somewhat technical-oriented enumeration of such and similar potential advantages could be continued. However, what was said above prove convincingly enough that expansion of specialization is in principle advantageous.

In Hungary nobody disputes the correctness of the principle itself nor the considerable lag in its realization. All the more lengthy and heated debates are being carried on concerning the possibilities and limits of its practical implementation. They originate partly in the conditions of our domestic economic activity and partly – in connection with the present characteristics of CMEA cooperation – in the sphere of foreign economic relations.

Limits and opportunities in the Hungarian economy

If we accept that the extent of specialization lags considerably behind the level justified by the available technical standards and other technical-economic implications, there must be some kind of a cause – or some incidence of causes – to which this lag can be attributed.

It had been a retarding force for a long time that in the efficiency requirements a looser "national domestic standard" appeared and not the stricter international standard; this was characteristic mainly of the price system. In case of Hungary this cause has disappeared in principle, in reality its influence is slowly fading away.

There is another basic cause manifesting itself vigorously, the retarding force of which is significant. It is that the whole system of goals of economic management, the preference-scale for evaluating performance, the handling of the priority tasks in planning and control are entirely linked to the direct demand structure of the end use. On this

account, there is a specific type of end product orientation definitely dominating the whole economic management in Hungary, in the other socialist countries as well as in their mutual economic connections. The products at an intermediate stage of production are pushed to the periphery of attention and judgement.

Signs of this attitude are reflected, for example, also in the great number of large enterprises producing finished products in full line, and in these enterprises the production volume of partial processes is adjusted to the size of the production serial of the end product representing the main profile of the enterprise. Thus it has become a permanent feature at the level of individual branches and the national economy that the overwhelming majority of partial production processes lags far behind the size of series that would be profitable with the application of modern technology. This conditions technological progress in a way that in far too many cases technologies corresponding to the small production series are applied or, if modern high productivity machines are purchased for the development of some individual fields, they are idle for the most of the production process. Raising every individual partial production process of "universal" enterprises with full vertical production to the most advanced technological level on the principle of self-sufficiency is impossible from the outset. After all the end-product-oriented production organization creates in itself unfavourable conditions for technological development.

With great efforts and large additional inputs with some products we may succeed in approaching the technical parameters of the most advanced producers even with this production organization, but the length of the production processes is such an adverse factor which finally reduces the world market competitiveness of the products.

The lag of the technological level is especially disadvantageous in that scope of products where Hungary participates in the international division of labour in accordance with her general economic development level. It needs no proof that with the technological development policy – primarily of the follow-up-type – that can be realistically implemented in our country a great part of products that can be produced have already passed the upward stage of their life-cycle on the world market. When Hungary enters the market it is in general in the stage of mass production and sales and then – with prices already at a much lower level – it is high productivity, low costs, reliable quality, short delivery period and similar factors that determine international competitiveness. This is already the competition of underlying production capacities where it is of decisive importance in what proportion of all the work processes necessary to produce the given product we succeed in introducing the most modern, high-productivity processes. Under the present conditions of technological development it would be reasonable for us to fit into the most detailed international division of labour so that Hungarian endowments are adequately utilized. It is already obvious that this adjustment requires at any rate reduction of the number of partial processes united in one enterprise, a wider operation of enterprises producing components, parts and units and, by all means, an increase in the economic weight of the small and medium-sized enterprises.

The expansion of capacities producing components, parts, and units has been put on the agenda of practical implementation as a result of the comprehensive debate on

"background industry". The emergence of the problem and the correspondingly formulated development concept is, however, connected primarily to the absolutely necessary reduction of the considerably expanded import of parts and components from the West and to the easing of the chronic domestic shortages in components and parts. The large-scale import of parts and components would not be a mistake in itself. Moreover, it could be a characteristic feature of the economic model of participation in the international division of labour, provided Hungary has the necessary competitiveness in other production links and the necessary export potential to ensure the equilibrium of foreign trade. Therefore, we consider it correct that the initial objective (and the principle of structural development) should not be simply the short-run task of reducing high import demand, but the long-term aim of creating high technology production capacities which lead us towards the gradual creation of large-scale enterprise capacities producing specialized parts and components.

In our reasoning about structural policy, development concepts connected with what was said above should be complemented with concepts putting the raising of efficiency of production processes in the limelight. The competitive world market positions of the national economy are determined in the long run by the development level and organization of production. A highly developed production machinery lays the foundation for successful participation in the international competition in a wide range of products and services.

On the basis of market research it is then possible to select from this field that narrower range of specialized products which can serve for foundation of the actual production programs. In our opinion this order of formulating development concepts differs from the method dominating at present the Hungarian practice which defines first the end product and plans accordingly the capacities necessary for production but which is unable to embrace the whole production process in respect of technological development.

It is not easy to create the condition for a structural policy pointing towards increasing specialization and cooperation nor for the implementation of a corresponding concept of enterprise organization.

Insteated of a growing number of specialized independent enterprises we had to witness an opposite trend in Hungary even in the near past: large enterprises dominating a range of some individual product groups – guided by considerations to ensure supply and also to obtain labour – incorporate in series the cooperating and supplying small enterprises. To justify their action they usually refer to the weakness of supply and the looseness of contract discipline which is an actually existing unhealthy phenomenon. However, the trouble is that the harmful side-effect of the cure is deeper and longer-lasting than its advantageous effect. After an adequate number of amalgamations, through concentration of a growing proportion of the production line, up to the finished product, this cooperation dependence can be reduced to the level of raw material supply containing hardly any specific processing and then the "fight" might be carried on in the field of stock management and import restrictions. In the end the national economy suffers from

the consequences, because a specialization subjected to a single or a few finished products is not a real specialization in the greater part of the production.

Reversal of the trend of amalgamation, and creation of a contract discipline enforcing severe sanctions are in fact preconditions of the existence of specialized, independent enterprises establishing a healthy cooperation with one another. Obviously it cannot be disputed that in this respect stricter legislation may also have a part. However, legislation should always be in harmony with the applied modes of the prevailing economic control and management and the extent of sanctions should be proportional to the given degree of freedom in the management of the enterprise, otherwise the legal rigour would rather hinder than promote the smoothness of the production process.

Another basic precondition of the general expansion of specialization and cooperation is a considerably higher level of production services than today – thus of transport. A greater degree of territorial separation of production processes would lead to a vast increase in transportation, on the one hand and would raise much higher requirements in respect of punctuality and reliability than those prevailing at present, on the other.

Similarly, a rapid increase is to be achieved in the flow of market and technical information and in the marketing activity of enterprises and specialized institutions working for them. There are considerable reserves in all these to increase efficiency. However, in case of production cooperations carried out under technical-economic conditions considerably more complicated than the simple commodity transactions, in order to explore possibilities and to clarify the conditions of their realization utterly new perspectives in the ability of market orientation are required.

The problems of socialist entrepreneurship, its realization, the social recognition of the material and moral consequences connected with risk-taking and successful performance are as yet unclarified and still in the early stage of theoretical investigation. A wide-scale expansion of entrepreneurial initiatives cannot be ensured without methods of economic management and a political and moral atmosphere favourable for them.

The question is expected to raise much controversy how much is to be done by the enterprises and how much should the central economic management undertake in the development of cooperation. Exploration, coordination and solution of hundreds of technical and economic problems connected with concrete cooperations can be successful in general only through the activity of enterprises carried on their own responsibility. In order to recognize opportunities for economically advantageous cooperation, detailed technical and economic information is required, and a considerable part of that is supplied just by the production conditions of the interested enterprises.

Through adequate planning, regulation, a correct setup of the organizational system, development of services, by ensuring adequate conditions for international cooperation through agreements and the necessary harmonization of the various elements of macro-economic conditions central economic control bodies can promote expansion of the division of labour through cooperation. Beyond such indirect methods the central

planning and control bodies have also possibilities and duties in shaping prices directly at the level of individual branches or products which originate in the present Hungarian system of planned economy and the planned CMEA-cooperation.

The role of specialization and cooperation in the further development of CMEA integration

According to certain views there are no considerable reserves for the further expansion of mutual cooperation within the framework of the traditional forms of trade. Under such conditions a closer cooperation within the CMEA may open up new opportunities. There are no serious differences in opinion as far as the evaluation of potential advantages is concerned, but the way of practical implementation can be regarded much less clarified.

In the development of CMEA cooperation we have to set out from the real fact that in the majority of the member countries the internal economic mechanism does not promote, moreover hardly permits the initiative and independent activity of enterprises in international specialization and cooperation. The internal wholesale prices deviate from both world market and CMEA foreign trade prices and production is separated from foreign trade both economically and organizationally. The lack of an active foreign exchange system leads to a bilaterally strictly balanced order of foreign trade. It is essentially only Hungary among the member countries that has a mechanism making enterprises "outward-looking", as against the one discussed above making enterprise activity to a great extent "inward-looking". We cannot expect member countries to change basically their economic mechanism although they modify it from time to time. At the same time we cannot give up further developing our own economic mechanism on the present principle bases in conformity with Hungarian conditions.

There seem to be three ways to lead out of the difficulties caused by differences in the mechanisms. Two of them, however, lead in fact to a blind alley. For if we made the "inward-looking" mechanisms, more similar to each other they would not become "outward-looking" on this account, just the opposite. If we tried to counterbalance the diverting influence of the internal mechanisms by means of a powerful joint integration mechanism then, amidst the conflicting effects of the internal and the international mechanisms, a part of the problems would remain unsolved. The third way is a partial and gradual harmonization of national government economic policies, making cooperation of state level more flexible simultaneously with the gradual expansion of enterprise contacts.

Beyond the problems of economic mechanisms certain differences can be found in the judgement of those guiding principles and target orientations which can serve as starting bases for the CMEA level expansion of specialization and cooperation and which can determine in a longer run the major directions of structural policy, especially in the case of smaller countries with open economies. Basically two types of starting points and target-orientations can be taken into account.

According to one of the variants we have to set out from the joint needs of CMEA member countries as planned in balances drawn up physical terms, and the production tasks for branches have to be distributed among the branches of the member countries. International specialization and cooperation have to be organized so that primary aim should be the achievement of optimum efficiency at the level of the community. In order to ensure this, perhaps certain countries would have to make sacrifices.

Another type of approach might be that the individual countries try to achieve an organizational and structural regrouping of their own factors of production which raises the potential world market competitiveness of their production capacities to the highest possible level – partly through deepening national and international specialization. Then they would try to fit, with the products by way of some kind of multiple iteration, in the world-wide but first of all the CMEA level international division of labour. In this case the basic target is national economic efficiency and through it the community level optimal efficiency might be achieved.

In our view this latter approach would correspond most to the efforts aimed at increasing efficiency, to the better exploitation of special national conditions and, last but not least, this may ensure a wider technical and economic basis for the general deepening of specialization with a greater degree of freedom on the markets. Both alternatives take into account the further development of economic cooperation with countries outside the CMEA, the growing role of specialization and cooperation also in this sphere of international economic cooperation. But while the first approach deduces the emphasized interestedness of CMEA integration in outside cooperation only from aggregated development and product programs and determines more or less the possible roles of the individual countries in all this, the latter approach sets out also in this respect from the exploitation of specific national conditions and regards the structure of cooperation with outside regions as a by-product that may be changed flexibly.

In the interest spheres of CMEA cooperation the dual and conflicting valuation systems of mutual performances have led even so far to considerable and ever expanding conflicts, i.e. the valuation confronting "hard" with "soft" products as expressed by the rouble prices.

A number of considerations indicate that the dual valuation system arising from the lack of convertibility is going to be a serious retarding factor to a specialization assuming the expansion of mutual deliveries of semi-finished products, components, parts, and intermediates. The creation of capacities producing semi-finished products with the most up-to-date production methods requires in most cases considerable imports of equipment and know-how from the Western countries. Besides, the expensive energy and raw materials – regarded as of world market "hardness" also on the socialist market – and used for the semi-finished products produced may constitute a considerable proportion. All this may give rise to such interests that in the division of production every participant rather tries to obtain finishing profiles – end products – since it is in this stage of

production that the greatest possibility exists to include the highest possible proportion of own national labour inputs.

This one-sided interestedness may be further increased by the CMEA-level price formation of certain semi-finished products. There is a strong belief that prices for the semi-finished products in the CMEA must not be determined according to the accepted world market pricing principle adjusting to the price the main markets – but at a much lower level. Arguments for this emphasize the following points:

– In the individual CMEA countries, but first of all in the Soviet Union, the prices of components and parts are lower than the price level determined according to the CMEA pricing principle. Under such conditions enterprises producing finished products are not interested in the use of imported semi-finished products.

– Undertaking a semi-finished product profile with the aim to deepen specialization means anyway a costs reduction for the producer and it is completely justified economically to share the arising advantages with the user.

– Finally, it is usually mentioned among the arguments that adjustment to world market prices is practically not feasible since cooperation deliveries are in some cases so specific that they are not comparable with cooperation products to be found on the world market, not to mention the fact that information on prices of such cooperation agreements is, as a rule, not available in the Western countries.

As for ourselves we are going to challenge these arguments.

Keeping domestic prices of semi-finished products and parts at a low level – usually lower than actual social inputs – is connected with the already debated end-product-centered approach and in fact it means a hidden way of subsidizing those turning out end-products. As far as the consequences prevail only in the sphere of internal production relations, this is a matter for domestic economic policy preferences. But as soon as these connections extend over the border, the practice of depressed prices on parts already modifies income distribution among the countries. Moreover, since among investment and current production inputs a high proportion is represented by products of "world market hardness", this pricing principle would amount at the same time to an international redistribution of convertible assets. In both cases at the expense of the country delivering parts.

As far as the unit-cost-decreasing effect of the mass production of semi-finished products and the distribution of connected advantages are concerned, their price forming effect is surely expressed in the Western main market price which are considered as base of reference. The assumption seems to be much more justified that in the realization of economies of scale Western enterprises and plants determining world market prices have progressed much farther than we have and thus comparative prices already reflect heavily the cost reducing effects. This speaks for setting CMEA prices somewhat higher than those at the main markets for semi-finished products and parts in order to ensure the necessary incentives at least in the early stages of the general expansion of specialization and cooperation.

Finally, as for the difficulties connected with the documentation of world market prices, we would like to mention that if there is no reference price it is difficult not only to formulate CMEA prices near to it but also to set prices lower than it is.

The acceptance and introduction at CMEA level of the concept of depressed prices on parts would make it difficult first of all for the smaller member countries to establish more specialized production profiles based on deepening international specialization. Demand for end-products and its structure are influenced by the biggest final users and thus the opportunities for the small countries to choose profile shifts rather towards deliveries for the sector producing end-products.

Studies dealing with the expansion of specialization and cooperation point out certain difficulties in several other fields and respects, retarding factors or simply the lack of necessary preconditions. Thus for example the lack of transport capacities or their lagging behind demand coming from international cooperation are mentioned as a grave problem. It is well known that even at the present level of mutual deliveries the increasing transport difficulties threaten to lead at time to an impossible situation. Without a fundamental and substantial increase in transport capacities these difficulties would emerge with greater intensity in the case of an international division of labour with higher specialization, which is surely more transport intensive than at present.

Significant progress would have to be made in the field of technical standardization. It is no mere coincidence that CMEA multilateral production specialization has been successful primarily in those fields where standardization has progressed the farthest. These fields are first of all ballbearings, other standard parts and units of general destination, ships, metal working machine tools. Further progress is hoped from the fact that within the CMEA Standing Commission for Engineering the Permanent Working Group for Standardized Components, Parts and Units was set up which prepares standards and norms for a number of new components, parts and units for the community and submits also recommendations which relate to production cooperations. A similar work is being done by Interatomenergo in the field of engineering for the atomic industry and also by other CMEA organizations.

It is a recurrent question of the CMEA cooperation which level in the hierarchy of the organizational system of a national economy should be the main active agent in initiating and responsible for the implementation of cooperation. In the majority of the member countries only the central planning authorities and the branch (sectoral) ministries are regarded as competent for action with the simultaneous inclusion of enterprises with foreign trade rights. The idea of a certain degree of decentralization of this process has emerged also in these countries, in such a manner that industrial associations situated at the medium level of the management hierarchy would be the carriers of the international cooperation in individual sub-branches of engineering, if authorized to carry out foreign trade activity. Such development would surely be positive and therefore desirable.

In the system of economic control and management in Hungary it is the enterprise with independent decision right that could be a successful carrier of the expansion of cooperation, therefore such activities of the enterprises should be intensively developed.

Naturally, cooperations of larger scale having decisive influence on the structure of the economy are intended and will be carried out also in the future in the framework of interstate cooperation. It might be a further task of our state organs to play the role of a bridge between the centralized administration of the brother countries and our more decentralized order of procedures. Inclusion of the enterprise level seems to be inevitable everywhere if we want to achieve a qualitative change, a turn towards modern cooperations.

A series of problems emerge in connection with the given characteristics of international settlements, the limitations of money and commodity relations. Under the conditions of bilateral balancing and the simultaneous existence of multiple systems in the mutual valuation of performances as well as the given characteristics of the internal price and financial systems of the individual countries, it is rather difficult to find those areas where specialization and cooperation promise economy of social labour that can be verified also by accounting methods. The problem is further complicated by the fact that macroeconomic advantages, the existence of which can be proved only by complicated and restrictedly reliable calculations, may emerge as of different magnitude or even with different sign in the enterprises realizing the division of labour and thus some harmony between national economic and enterprise interests can only be brought about by means of an intricate jumble of individual subsidies and taxes.

It is connected mostly with these valuation problems and the lack of convertibility that even in connection with the expansion of specialization and cooperation the establishment of certain bridging constructions of non-monetary character has emerged, too. Thus it has been raised that

– in the international distribution of production profiles in production processes leading to the end-product the various countries should be allotted production profiles nearer to raw material processing or to the output of end-products in balanced proportions;

– the undertaking of production phases requiring large energy consumption and convertible currency inputs should be compensated by mutual deliveries of goods of world market "hardness";

– in the field of certain cooperations involving large volumes attempts should have to be made to achieve a zero balance in the mutual deliveries;

– special clearing accounts should be created the temporary debts and claims on which could be liquidated only by mutual deliveries of the cooperation in question.

If such secondary valuation constructions also "settle down" on the specializations and cooperations – institutionally and in a wide range – which can be hardly connected with mutual advantages arising from the expansion of labour division even through complicated calculations, they do not exert sufficiently stimulating influence on the enterprises engaged in the practical implementation. It is to be feared that this unsettled state and low efficiency of the financial accounting sphere might be a serious obstacle to the development of the whole process.

Expansion of the principle of cooperation and specialization may not only open up new opportunities for an advantageous increase of mutual deliveries within the CMEA, but might raise cooperation on third markets from the present initial stage to a level of macro-economic importance. National economies may expand their potential opportunities especially by jointly undertaking and successfully carrying out complex development projects required in the developing countries. Naturally, in the evolution of the whole trends and in the cooperation at third markets a very important role should be played by deeper specialization and cooperation in the division of labour with the developed Western countries and with the non-socialist countries in general. Valuation and accounting difficulties in bilateral and multilateral cooperations on third markets can exert adverse influence.

We believe that a fundamental improvement of the international flow of information is an important question for the development of the whole cooperating and specialization trend. It is not only a better knowledge of demand and supply factors that is required, but a regular and institutionalized exchange of information should be extended to such fields – which seem novel in respect of CMEA – as detailed production, technological development, investment and production technology problems. The recognition, initiation and realization of cooperation opportunities in production become almost impossible without them.

Even until the effects of efforts aimed at the improvement of conditions in the external and internal economic management systems make themselves felt, it is reasonable and unconditionally necessary to find and exploit all those oportunities that are offered under the given conditions for expansion of the process of specialization and cooperation to CMEA level. In our evaluation the changes for success of such attempts are nowadays much more favourable than in the preceding years. The circumstance that the need for increasing specialization is treated as the decisive link by the individual member countries and the joint CMEA forums – in respect of both the internal reproduction process and the further development of international cooperation – may be by itself promising for the acceleration of development in this direction. Despite limits and difficulties probably a wide range of actual specialization and cooperation possibilities can be revealed and realized through the mobilization of reserves in the systems of other instruments and organization of cooperation.

In the course of the coordination of development policy concepts it is possible to identify those areas where a deeper international specialization of production presents itself in such a manner that coincides with the special economic conditions and the trend of structural development concepts of every participating country. The selected areas and the tasks originating from them can be turned into action programs of production and development only after building them into the national economic plans and coordinating the individual national plans at CMEA level.

A few conclusions

The development of specialization and cooperation is a problem coming more and more into the focus of interest. By an analysis of the economic process we want after all to promote the development of practice and therefore try to define a few ideas for the practical work.

1) Our most general conclusion is that the topic should be discussed in identical approach in the fields of industrial policy and trade policy. Nowadays especially the elaboration of a uniform industrial policy has great importance but to link the development of agricultural production with processing is also very important, as well as to harmonize the roles of foreign and home trades in order to intensify the process of specialization and cooperation. In this context attention should be drawn to the following:

– In industrial policy such an economic environment should be created which provides a stronger incentive for the development of domestic and international cooperation. It would not be correct to relax the system of uniform requirements in regulation, consequently it is the really modern and efficient production that should be developed through cooperation. It is reasonable to support the additional capital requirements by extending credit and to leave additional incomes at the disposal of the enterprises.

– In the agricultural policy the principle of specialization can be applied primarily to deliveries of means of production with the condition that both suppliers and users should benefit from it, consequently technico-economic efficiency is a fundamental condition. A certain, wider production cooperation than the present one seems to be feasible in food processing.

– In connection with the enterprise organization it would be necessary to establish a relatively wide network of specialized plants and enterprises producing semi-finished products. They should be independent and supply for a wider range of processing enterprises and, where it is rational, they should establish contacts with the external markets. For plants within vertically organized big enterprises in many cases it is also justified and correct to accord greater independence and, with a view to external supply, to organize the production of certain parts and components.

2) In CMEA cooperation we insist invariably on the development of cooperation relying on a number of encouraging experiences, but pointing out at the same time shortcomings, i.e. that a part of specialization carried out so far are formal and of barter character and frequently relate to the superficial areas of production. As for a permanent cooperation of high technological level we raise the following ideas:

– Troubles originating from the excess supply of not quite modern investment goods would not be solved even if they were specialized or produced in cooperation. In contrast, setting out from the principle of "rather less but better" priority should be given to high technological level, especially to the specialization in complete equipments as well as modern parts.

– At the market of consumers' goods there are shortages in every member country; production policy aims at self-sufficiency, mutual deliveries rather serve for widening assortments. This should be borne in mind as the present reality, but in the long run we have to try to achieve a certain degree of specialization.

– The system of economic tools of the CMEA should be modernized lest it becomes an obstacle to the development of specialization. We should insist also in the future that in case of specialization the CMEA pricing principle should be applied, because only this connects adequately the interests of producers and suppliers and those of importers and users.

It would not be correct to analyze and develop CMEA cooperation in isolation, indepently from the rest of the world economy, because the connections of the member countries with the world economy will carry a significant weight also in the future. Cooperation with the external world economy should be developed so that it complements and promotes cooperation within the community.

We are confident that by analysing the development of specialization and cooperation we have grasped a factor of the system of goals and instruments of Hungarian economic policy important also in the long run. This is a target, too, for the attainment of which a number of economic, technical, and cultural instruments should be set into motion. At the same time, it is also an instrument as is anything for us that can be used to serve the progress of our economy.

СПЕЦИАЛИЗАЦИЯ И КООПЕРИРОВАНИЕ В ВЕНГЕРСКОЙ ЭКОНОМИКЕ И В СЭВ

Й. ФАЙ—Р. НЬЕРШ

Степень развития специализации и кооперирования производства, характер определяющих их механизмов внутри народных хозяйств стран в большой степени влияют на возможный уровень таких связей между странами. В докладе, прочитанном авторами на организованной Институтом экономики ВАН и Институтом исследования конъюнктуры и рынка конференции (в ноябре 1980г.), был дан анализ состояния специализации и кооперирования в Венгрии и в СЭВ. Статья написана на основе этого доклада.

Авторы констатируют, что по сравнению с объемом внешнеторговых связей Венгрии ее участие в международном процессе специализации можно считать относительно слабым. Одной из причин этого является неудовлетворительная степень специализации производства внутри страны, что в настоящее время уже в меньшей степени объясняется недостатками системы ценового и финансового регулирования, скорее — различным характером системы регулирования и организационной системы. Неблагоприятным является также то, что вся система целей хозяйственной деятельности (планирование, управление, шкала предпочтений в системе материальной заинтересованности) непосредственно связана со структурой потребностей конечного потребления (отсюда стремление к выпуску не промежуточного, а конечного продукта, готового изделия). Что же касается сотрудничества в рамках СЭВ, то необходимо исходить из того реального факта, что внутренний

экономический механизм большинства стран-членов СЭВ не проощряет, а зачастую даже затрудняет инициативу и самостоятельную деятельность предприятий в области международной специализации и кооперировании. Основной целью участия в международном сотрудничестве может быть только повышение эффективности национальной экономики и только этим путем может быть достигнута оптимальная эффективность на уровне содружества. Кооперированию между странами СЭВ, в частности, мешает противоречивая система оценки взаимных усилий и результатов. Не решен вопрос о том, на каком уровне иерархии должны находиться организации, проявляющие инициативу и являющиеся основными участниками кооперирования (предприятия, объединения, правительственные органы). Важной задачей является стимулирование стандартизации и существенное улучшение взаимной информации.

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THE ROLE OF TECHNOLOGY TRANSFER IN COOPERATION AGREEMENTS

From among the transfer mechanism available Hungarian enterprises usually prefer industrial cooperation, because it provides the most built-in guarantees that the supplying party will live-up to its obligations and ensure that the transferred technology can be used satisfactorily. Further reasons for which this mechanism is preferred are the trade expanding and payment balancing effects of cooperation. Technology transfer is an essential part of most cooperation agreements made by Hungarian enterprises, and it stimulates trade both directly and indirectly.

Two case studies discuss a transfer of technology from the FRG to Hungary, and from Hungary to India respectively, the first taken from the engineering, and the second from the pharmaceutical industry.

The paper concludes that cooperation agreements have mostly been useful and successful in transferring technology, in fostering a division of labour in R + D. They created an interdependence and proved to be a suitable transfer mechanism between countries with different economic and social systems.

The objectives of Hungarian technology transfer policy

In Hungarian technology transfer policy the macro-economic consideration is the general usefulness of the transfer (active or passive) to the national economy, but decisions have to be made primarily on the enterprise level in consideration of company objectives.

In a small country like Hungary, the national technological policy necessarily includes the setting of priorities of development objectives and active participation in the international division of scientific activities both by acquiring technologies abroad and by transferring technologies to other countries.

It is part of this policy to close the technological gap in areas where Hungarian industry has to learn, and to assist the learning process by others where Hungarian industry has something to teach. The closing of the gap can also constribute – besides levelling standards – to a more even flow of goods and a more balanced structure in world trade, of course not by disregarding and eliminating but, on the contrary, by making use of complementarities and comparative advantages. Our experience does not confirm the view held by some researchers according to whom industrial cooperation has done little to narrow the technological gap, although we admit that not all cooperation agreements serve this aim equally, the less so since this is far from being the exclusive

motive for cooperation agreements. But where technology transfer is involved, it must by its very definition support the growth of the scientific and technological capabilities of the recipient. As to whether this fosters independence or dependence may vary from case to case, and in the Hungarian view it mostly leads to interdependence, which is not something to be shunned, as international specialization and cooperation are factors which tend to reduce the capital intensity of development. It must, of course, be recognized that the transferred technology can be less or more advanced, as the case may be, and require various degrees of scientific and technical efforts from the parties, but the firm Hungarian policy is that it should not foster conservation of less advanced practices, on whichever side of the transfer process the Hungarian party should be.

The objectives of Hungarian technology transfer policy are identical with the agreed objectives of the "Draft international code of conduct on the transfer of technology", i.e. to facilitate and increase the international flow of technological information and to promote mutual confidence. As far as the further agreed objective – to avoid abuses of a stronger position – is concerned, it is felt that Hungary's economic system guarantees both that Hungarian enterprises will not fall victim to such abuses and that they will not themselves commit such abuses. They will only enter into contracts which are perceived to carry mutual benefits. No conflict between the "company perspective" and "country perspective" is conceivable in this respect, even though the enterprises make their own decisions and have no contracts foisted on them.

The above principles – including "mutual benefits" – apply fully to Hungary's economic policy towards the developing countries as well. There is a coincidence between Hungary's recognition of her international duties towards the less developed countries and her own development objectives directed at structural change. In the transfer of technology active participation by the recipient is welcome, leading to cooperation which has a beneficial effects on the recipient country's economy. Equity participation is accepted for a limited period if it is desired by the recipient, but the Hungarian objective is obviously not to export capital, but to assist the developing country's industrial development and to foster mutually beneficial economic relations. This involves the desirability of making use of locally available resources. Here again Hungary "does onto others as she desires others to do to her", as in her own technology imports too Hungary gives priority to projects where the raw materials, accessories and other inputs required can be made available or procured domestically to the greatest possible extent.

In the controversial question whether to prefer turnkey deliveries or the unbundling of packages, the Hungarian party – when the recipient – prefers the former, aware of the fact that if one of the components of such a system is neglected or poorly executed the whole programme, no matter how well conceived, may fail. In their offers of technologies, Hungarian enterprises may also offer packages, but they are ready to cooperate with local suppliers and/or suppliers of soft- or hardware from other countries, which already inevitably leads to a certain degree of unpackaging.

Whereas Hungary does not discriminate in her economic relations, the size of the country compels her to concentrate her efforts on certain regions and countries.

Outside the CMEA, the bulk of the technology transfer and industrial cooperation agreements of Hungarian enterprises are with about ten industrialized and as many developing countries.

A further important principle of Hungarian technology transfer policy is respect for the protection of industrial property, in accordance with the relevant international conventions.

The aims of Hungarian enterprises when the acquiring party

Hungarian enterprises will, of course, acquire technology from abroad when this is more economical or expedient than to develop it themselves or obtain it from another Hungarian enterprise or research institute. They will also consider ancillary benefits when making their decision. It is equally obvious that they acquire technologies from industrialized countries.

A survey made by the Hungarian Institute for Economic and Market Research in 1978 confirmed that in the view of Hungarian enterprises one of the most important aims of industrial cooperation was the acceleration of technological development, the learning and application of new technologies, and that in the vast majority of such cases the Hungarian enterprises had not wasted efforts on first trying to develop themselves the technology in question. Recognition of the importance of raising technological standards had been emphasized by practically all enterprises questioned in the course of the survey. This was a reconfirmation of the findings of a survey made in the Federal Republic of Germany by the Institute for Foreign Trade and Overseas Economy of Hamburg University in 1977, when over 80 per cent of the cooperating FRG companies questioned answered that their Hungarian partners had manifested a strong interest in the technology transfer, and voiced the opinion that the cooperation in effect succeeded in improving the technical equipment of their Hungarian partners and in increasing the technological knowledge of their employees.

On the enterprise level the benefits of acquiring technology manifest themselves in higher productivity, and/or cost saving, and/or quality improvement, where the new technology is introduced into an existing manufacturing process. Often, however, the aim is to introduce an entirely new product. In both cases, the acquisition of the technology is, of course, no final aim, but a means to improve marketability on the domestic and/or export markets.

The aims of Hungarian enterprises when the supplying party

Hungarian enterprises supply technologies to industrialized and to developing countries. The transfer of technology is for them an alternative strategy to supplying goods manufactured by themselves, and is motivated by the desire of obtaining maximum profit in the given market circumstances, as well as by the governmental and social expectation to assist developing countries.

When supplying technology, the Hungarian enterprises are motivated by the expectation of income, weighing this expectation against the risks that every supplier of technology must face.

Transfer mechanisms

At the present stage of technical-scientific progress, a number of things are necessary – in addition to knowledge – for the transfer of technology in practice: machinery, materials, skilled engineers, technicians and workers. Numerous technologies demand production on a scale where access to markets and marketing ability become of prime importance. Since the means and knowledge must be paid for out of the proceeds of production in a similar or different area, or the purchase price must be advanced, financing has become a very important factor.

It follows that the objects to be transferred may include new or improved production processess, or new components, finished products, technological lines and complete industrial projects (with incorporated technologies), or management and work methods and organization.

The transfer necessitates a combination of documentation, training, learning visits, equipment, market and environmental analyses, organizational planning, and personnel selection.

The major mechanisms through which the transfer of technology may take place are: imports of machinery, licensing and know-how agreements, leasing, hire-purchase, turnkey job, purchase of company, joint venture, or industrial cooperation.

Prerequisites of a successful transfer include – whichever mechanism is chosen – the common acceptance of profitability as a criterion of success, not too divergent expectation by the parties, an agreement on the purpose for which the transfer is being undertaken, and that it must be beneficial to both parties in the long run.

The traditional form of technology transfer in East-West relations – simple licensing – is sometimes regarded as insufficiently effective, because it need not include any commitment on the part of the supplier to the successful application of the transferred technology. This is one of the main reasons why additional features have been built into transfer contracts providing for payment in goods produced by the transferred technology. In Hungary, priority is usually given to technology imports made under such arrangements, and the same demand is often made when a Hungarian enterprise supplies technology to a developing country. Nevertheless, not all East-West licensing agreements provide for payment in the licensed product, and – on the other hand – sometimes the supplier may be the main beneficiary of such an arrangement which bars competition from the licensee, limiting his exports to deliveries to the licensor.

Industrial cooperation as the transfer mechanism

The above-mentioned survey made by the the Hamburg University Institute has sought confirmation of the importance of technology transfer in industrial cooperation, and whether cooperation is an adequate instrument for inter-system technology transfer. At least in cooperation agreements made by Hungarian enterprises some transfer of technology is almost invariably present, and the vast majority of enterprises maintain that acquisition of foreign technology is much safer within cooperation than through simple import channels.

In addition to the importance and adequacy of the cooperation model, the survey also investigates the influence of technology transferred through cooperation on the production and export structures of the East European (including the Hungarian) economies. Here the – from the Hungarian side – surprising and even disappointing finding (or conjecture?) may be quoted according to which a delegation of cooperation decisions to the enterprise level leads to a reduction of the importance of technology transfers, since the value of the contract sum involved in the cooperation diminishes and the interest in obtaining the most advanced technologies slackens on the enterprise level.

The survey comes to the conclusion that East-West industrial cooperation is a compromise, because while industrial cooperation appears to be superior to other transfer mechanisms in the view of the Eastern partners and is proven to be unequivocally superior in respect of such criteria as ability for the technology transfer, image promotion on Eastern markets, and access to new, resp. retention of existing markets – very important criteria since access to the market is as a rule the principal motive for Western firms to transfer their technology –, in comparison to other mechanisms it may weaken control over the technology and be costlier. These findings do not coincide entirely with Hungarian experience. We are rather inclined to agree with the recognition that cooperation is superior to the other transfer mechanisms, while accepting that its results should not be overestimated as far as modernization of the industrial structure of the acquiring country is concerned, and that it does not necessarily and in all cases reduce the technological gap.

It must be considered another misconception or misinterpretation of facts when it is claimed that – since both parties are motivated by the desire to increase their exports – if both succeed, the transfer of technology through cooperation does not improve the balance of payments of any country involved. It should be obvious that

- the purchase of technology is less of a burden to the acquiring country's balance of payments if the transaction also involves the export of the resulting product,
- if both parties increase their exports, this – while possibly making no change to the balance of payments – has a trade expanding effect, increasing the volume and/or value of production in both countries.

Incidentally, the statistical record kept in Hungary of imports and exports under cooperation contracts shows without the shadow of a doubt that in their sum the cooperation agreements have a beneficial effect on Hungary's balance of trade.

It is, of course, true that although one of the reasons why cooperation is often preferred to other transfer mechanisms is the consideration of its effect on the balance of payments

- in buy-back agreements a debt is first incurred by the acquiring party,
- it becomes difficult to pay off the debt if the supplying party later does not fulfill its obligation and declines to buy back the product.

Only genuine interest of the technology-supplying party in receiving products resulting from the technology it has delivered offers a real guarantee to the acquiring party that buy-back commitments will be met, full documentation and training will be provided and the technology continually updated.

As far as the "costlines" of the technology transfer through cooperation is concerned, it may of course, add to the costs that differences in habits, laws and in the internal organizations of different countries must be taken into consideration, as well as different levels of economic development and the influence of the socio-economic system. In the last resort this 'cost' is borne by the acquiring party, unless the supplying party has some reason for generosity.

Technology transfer as an essential substance of industrial cooperation

In Hungary, priority is usually given to licence agreements combined with economic cooperation, and cooperation is considered a suitable instrument for technology transfer. It is puzzling why the West German enterprises questioned by the Hamburg Institute should have found technology transfer a less universal factor in cooperation agreements with Hungarian enterprises than with Eastern European enterprises as a whole. The explanation may perhaps be found in the fact that the sample included a considerably larger number of cooperation agreements with Hungary than with some other CMEA countries and thus also a higher number of cooperations where the acquisition of technology was not the dominating motive. It may be true that Hungarian enterprises do not practise only the most advanced form of cooperation, where high technology is involved. This type of cooperation is all the same favoured, and need not necessarily involve buy-back, but may also provide for coproduction, seeing that Hungarian enterprises are quite often capable of contributing to the joint development of a technology.

The coproduction and specialization forms of cooperation often incorporate either transfers of disembodied technology through licensing or embodied technology through the delivery of machinery and equipment; the latter may also be accompanied by "disembodied" software. To Hungary machinery may be supplied by the Western partner with or without the transfer of ownership.

In Hungary, where decisions about cooperation are being made on the enterprise level, the technologies transferred under cooperation agreements do not usually involve structural changes on a national economic scale but are more likely to be of an innovative

nature. Innovation does not stop with the acquisition of a novel technology; many enterprises, after entering into agreements for cooperation in production and marketing, extend their cooperation to the process of innovation as a result of discovering a demand for a new or modified product or process. Attention is then directed towards the possibilities of joint research and development. Joint research and development is a means of accelerating the diffusion of technology at a lower cost, through sharing innovation capacities, to the benefit of both parties. The Intermediate Report of the Hamburg University Institute found on page 25:

"In the investigated research cooperations the Western share in the technical investments was, as a rule, considerably higher. Alone in cooperations with Hungary contracts with equal investments by both sides were preponderant, i.e. the until now dominating nature of East-West research cooperation as scientific-technical developmental assistance on behalf of the Western enterprises was in these cases replaced by cooperation involving bilateral technology transfer."

This finding reflects the Hungarian endeavour of developing cooperation arrangements which cover the entire production process from research to after-sales service, whether the inventions and ideas originate from the Hungarian or the foreign partner.

Half of the companies interviewed, out of companies covered by a survey of companies having experience with industrial cooperation and joint ventures in Eastern Europe, sponsored by the US Department of Commerce, rated income from Eastern technology or know-how among the upper half of anticipated sources of income from cooperation (as reported by John B. Holt in East-West Trade: Theory and Evidence, Bloomington 1978. p. 129).

It is nevertheless a fact that the flow of technology has been higher from West to East, and this may indicate a technological gap, at least in some areas, although the shortcomings of the East are more often in the commercialization of the results of research than in the research itself.

The trade-stimulating impact

Industrial cooperation contributes to increased international specialization and thereby stimulates visible and invisible trade flows built on this newly created specialization. Cooperation undoubtedly leads to deliveries in both directions which would be absent if other technology transfer mechanism were chosen. Cooperation both facilitates the transfer of technology and creates additional trade. In the Hungarian experience it has fulfilled the expectation towards increasing the exports of marketable products.

It is nevertheless necessary to voice here some fears. The function of the imports of modern technology to induce new exports is seriously put into jeopardy by Western protectionism directed at hindering the exporting of East European (including Hungarian) finished products. This may endanger the entire outward-looking, technology importing, external economic strategy.

Surveys on the motives of, experience with, and efficiency of cooperation

The above-mentioned American report pointed out that segmentable technologies that were free from export controls could be shared successfully with East European enterprises by transferring to them the labour-intensive production with the American partner retaining the more capital-intensive and technical operations and protecting company technology, experience had however shown that by transferring to the East European enterprise all the necessary technical information it was possible to gain additional profit when the products were delivered from Eastern Europe (and we believe that this refers to a Hungarian enterprise) to the US company's West European subsidiaries, saving production cost and freight.

The survey entitled "Industrial cooperation with the Soviet Union and Eastern Europe" and published by the Swedish National Board for Technical Development in 1980 found that, according to the Swedish firms questioned, technology transfer was the most frequently reported motive of the Eastern side, whereas among the motives of the Swedish side it only ranked fourth, far behind export promotion, cost and accessibility advantages, and *better utilization of existing capacity*.

This Swedish survey provides also a very clear classification of the *types of cooperation* from the aspect of technology transfer, distinguishing basically between "two-phase cooperation" and "functional differentiation". Since nearly half the cooperation agreements studied are with Hungarian enterprises, the findings can be considered to apply to Hungary. Out of 53 cases 48 involved the transfer of software (disembodied technology), viz. 40 transfers from Sweden, 2 transfers to Sweden, and 6 reciprocal transfers, while 27 cases involved the first-phase delivery of hardware (plant, machinery and equipment), viz. 26 from Sweden, one to Sweden, and none reciprocally. A similar classification by the Hamburg University Institute divides the transfer mechanisms into seven classes from traditional foreign trade transactions through compensation deals to intersectoral cooperation, intrasectoral cooperation and joint ventures. The more traditional classification by the Institute for Economic and Market Research of Budapest found that when classifying the cooperation contracts by their dominating element, the *acquisition of technology* was the dominating element in 62 per cent of contracts (between Hungarian and Western enterprises). Practically all surveys have found cases where the partners start with limited agreements and move towards global ones, and do not seem to bear out altogether the finding of the Hamburg University Institute according to which East-West cooperations are rather the result of financing decisions for technology deliveries than the result of *planned division of labour* (Research Report 18, p. 15). This is only true if only intrasectoral cooperation is accepted as genuine division of labour, which – in our view – would be too narrow an interpretation of this concept. The findings in research report 11 (p. 40) confirm that multinational corporations and other import-oriented enterprises prefer intersectoral to intrasectoral cooperation – in our view exactly for the reason deduced by the American survey, i.e. it is a profitable

form of the division of labour. It may be true that this applies less to smaller enterprises for which intrasectoral cooperation, i.e. cooproduction or specialization is more attractive.

Smaller enterprises are less likely to experiment with *developing new products* and more inclined to look straightaway for already developed technology to be acquired, but are also less willing to accept risks and therefore prefer already mature products.

There is little doubt that many cooperation agreements successfully *bar competition* from the acquiring party by satisfying through the buy-back of finished products or components the desire and need of the acquiring party to make the supplying party interested in a successful transfer, to balance the convertible currency paid for the technology, and to achieve economies of scale. Hence such a buy-back arrangement should seem to satisfy them even if the transfer contract prevents them from exporting directly to Western markets. Incidentally, this is also confirmed by the Hamburg University Institute, which reports (in the intermediate report, p. 11.) that the West German enterprises have less fear about competition from their cooperation partner if it is a Hungarian enterprise than if it is of any other CMEA country. On the surface this may indicate that they have more trust in Hungarian partners, but is more likely to mean that technology transfer agreements with Hungarian enterprises contain more restrictive clauses or cover less competitive technology.

Most surveys have found problem areas in cooperation with Hungarian enterprises to have been much smaller than anticipated. Reference has already been made to the fact that Hungarian enterprises have not been keen to enter into direct competition on the partner's established markets – initially often a major source of anxiety. In permitting delivery to third countries American supplying parties have usually been more generous than Europeans, anti-trust vulnerability stopping them anyway from protecting their home market.

The world economic situation as well as the increasing awareness of the ability of the Eastern partner to adopt and to adapt Western technology quickly tend to strengthen the resolve of Western companies to *protect their markets.* The innovation ability of Hungarian cooperation partners was judged by West German firms to be good in 41% of cases (against a regional average of 36%, and in 80% of cases where the Hungarian partner had initiated the cooperation) (intermediate report p. 54).

Practically all surveys agree that Western enterprises are led by considerations of *marketing strategy* and it is exactly these considerations that make them prefer cooperation to other transfer mechanisms. Technology transfer is for them a marketing instrument. Some claim that for the Eastern enterprises, on the other hand, acquisition of the technology is an end in itself. At least as far as the Hungarian enterprises are concerned, this claim is certainly to be doubted: for them, too, cooperation is a means to improve the marketability of their products. This is confirmed by the fact that 76.5% of the interviewed West German firms reported that the cooperation increased the share of exports in the output of their Hungarian partners (intermediate report p. 64). It is, however, open to question whether this effect is lasting if it is caused exclusively or

overwhelmingly by the purchase obligation of the Western partner, especially if the technology is obsolescent. Here again there seems to be a correlation between multinational and other large corporations and their interest in steady economical import sources, and on the other hand, between medium and small enterprises and their use of cooperation mainly as a sales argument – and many Hungarian enterprises cooperate with medium and small Western enterprises.

Naturally, the transfer of technology is dependent on *interaction between people,* and the surveys deal with this aspect of cooperation at some length.

The supplying party, of course, endeavours to cover its costs and risks in the price of the technology and the acquiring party in the price of the product produced by the acquired technology. Arriving at *fair prices* is of great importance and many negotiations fail at this stumbling block. Hungarian law permits the parties to agree at their option, whether technology hardware, such as machinery or materials, or industrial property, such as patent or know-how, are concerned. Both flat fees and royalties occur in the Hungarian practice, the latter dominating in the case of production under licence.

Most surveys agree that cooperating enterprises feel that cooperation – as a rule – *reduces risk.* This is not necessarily a positive factor in every case, because the search for security may entail satisfaction with lower profits, i.e. it may accommodate the avoidance of risk-taking.

The surveys provide a rather contradictory picture about the influence of cooperation agreements on the *macrostructure* of the Hungarian economy. It can probably not be doubted that so far this influence has been marginal. Yet, taking the number of cooperation agreements into consideration, it cannot be altogether negligible.

It really all boils down to the question to what extent the supplying parties *"protect" their advanced technologies* and pass on obsolete ones. The legitimate need of the supplying parties undoubtedly exists to protect their investment in research and development and to recoup this investment. This interest is sometimes met by Hungarian enterprises, when they are the acquiring party, by entering into an obligation not to conclude a cooperation agreement with a competing supplier, and not to copy the product even for a number of years after the expiry of the licensing contract.

The two pertinent key questions investigated by the surveys are whether cooperation provides more or less protection than other transfer mechanisms and whether the "core" of the technology is transferred or retained by the supplying party. The findings and the experience reported appear to be ambiguous. The retention of the core-technology tends to be self-defeating when the supplying party has – through inter- or intrasectoral cooperation – an interest in the successful adaptation of the technology, and at the same time the closer relationship brought about by cooperation allows the supplying party to retain or to exercise a higher degree of control over abidance by the stipulations of the transfer contract. It is probably generally true – as borne out by U.S. and West German surveys – that progressive companies which are self-confident about their own continuous R and D and innovative activity are less inclined to hang on to

their core technologies than enterprises which live in constant fear of new competitors appearing on their established markets.

The surveys seem to agree that in the majority of cases the product produced in cooperation is not the most *modern* and does not incorporate the *highest technology*, or the supplying party retains the core of the technology and thereby keeps the acquiring party dependent on the supplier's continued deliveries. The Hamburg University Institute makes the further claim (research report 18, p. 9) that in Hungary the interest is relatively lower in importing the latest technologies and consequently the technology transfer less significant than in some other Eastern countries. The Institute furnishes for this the explanation (intermediate report, p. 9) that their greater autonomy induces the Hungarian enterprises to give economic considerations priority over prestige, which makes them prefer cooperations with secure markets, while their financial possibilities are also more limited. This is only partly confirmed by the age of the technologies licensed by West German to Hungarian enterprises. While a Hungarian survey found that only in rare exceptions was the age under three or over seven years, the Hamburg University Institute reports (intermediate report p. 29) that Hungary was the only country to which technologies had been licensed that were less than two years old (12.5% of all licence agreements), just as Hungary was the only CMEA country which cooperated with Western enterprises in the manufacture of products that were still in the introductory phase, but on the other hand 25 per cent of all licenses acquired by Hungarian enterprises were over ten years old, while no technologies of such a high age were licensed to any other CMEA country.

In our view the explanation for this apparently contradictory phenomenon is that especially smaller Hungarian enterprises (including cooperatives) enter into types of cooperation for which there is little parallel in the other Eastern countries. Should these "irregular" cooperations be excluded, the dispersal of technologies acquired by Hungary according to age would probably not compare unfavourably.

The West German and Swedish surveys confirm that the cooperation motive for the Western firms often is (or includes) the *extension of the life of a product,* which is already in the saturation or declining phase, by reducing production costs and so gaining time (and capacity) for innovation. According to the West German partners questioned (intermediate report p. 27), 50% of the cooperation products were already in the saturation phase on Western markets, further 44% in the growth or maturity phase, and only 6 per cent in the introductory phase, but all of the latter came from cooperation agreements with Hungarian enterprises.

As the surveys have dealt with cooperation agreements which have been concluded, it is not possible to establish from them the number of attempts at technology transfer which have failed due *to export controls.* Probably, export controls – though not achieving the aim of preventing the production of high technology military hardware – have had the effect of distoring the R and D structure of some countries, making them more receptive to acquiring non-controlled technologies from abroad.

The high qualification of the Eastern *scientific personnel* is acknowledged by practically all surveys. The Swedish survey also points out that Hungarian firms managed to improve the transferred technologies. There are also a number of cooperation agreements under which the Hungarian party supplies technology or which are based on the continuous supply of Hungarian software.

We have dealt in this chapter repeatedly with judgements which the surveys make concerning the positive and negative effects which *decentralization* has on technology transfer within the framework of cooperation agreements. Let us quote here – without necessarily fully agreeing with it – from the summing up of this question by the Hamburg University Institute (research report 18, pp. 35–36): The ability to apply the Western technology is judged (by the partners) the more favourable, the more decentralized decisions on it are in the country concerned. At the same time the frequency of problems is also reduced. Nevertheless, a disadvantage for countries with decentralized decision-making can also be established. Namely, when enterprises themselves can decide about the kind of desired technology, they are now and then less demanding than central authorities, such as ministries. They are also satisfied with technologies which are no longer entirely new or are already overtaken in the West. Yet, the influence of cooperation on countries with decentralized decisions is to be judged positively because they did and do conclude many more cooperation contracts. They may adopt technologies in smaller dozes and of a less demanding nature but in greater width. More Eastern enterprises are involved. This occurs in an active form, and consequently the mastery of the technology concerned may most probably be achieved here.

Hungarian practice in respect of the most frequent issues. The forms of technology transfer

Transfer is always a learning process. Hence it almost invariably includes the training of management and personnel, the conditions of which should be agreed upon by the partners, with specific provisions for the rendering of technical services in the introduction and operation of the technology to be transferred.

Some documentation is usually presented in the negotiating stage to facilitate evaluation of the technology. This may include preliminary technical information and feasibility studies. The final documentation is specified in the technology description and listed in the agreement together with secrecy clauses and payment conditions. Hungarian practice usually requires the technology supplier's guarantee that the technology meets the description contained in the technology transfer agreement – accepting as a guarantee that the supplying party will purchase finished products or parts produced by the transferred technology in the framework of a cooperation agreement.

Embodied technology entails the delivery of machinery and/or equipment or their mediation by the supplying party. According to the Hamburg University Institute (intermediate report, p. 19) 43.8% of the examined cooperation contracts with Hungarian

enterprises provided for the transfer of technology through the delivery of machinery. A technology transfer through the supply of machinery differs from a simple sale of machinery inasmuch as the transaction is only consummated when the recipient is in a position to use the machinery effectively.

It is not unusual in Hungarian practice to include in the forms of the transfer – as apart from training – a demonstration of the technology in action.

In intrasectoral cooperation, such as coproduction, the delivery of components from the supplying to the acquiring party for a definite or indefinite period is also often a form of transfer.

Payment for know-how and licences may be made in the form of flat fees and/or royalties, Hungarian law permits the parties to agree at their option, but the payment conditions must be regulated in the cooperation agreement. "Payment in goods" may occur in an arrangement whereby the licence fee is credited to the supplying party which can use this credit only for the purchase of goods manufactured through the technology acquired.

Any transfer mechanism is likely to include several forms of transfer, and this applies even more to cooperation agreements of which the entire transfer is but one element, although the complexity (number of forms applied) varies, of course, from contract to contract. The complexity of the contract (the transaction) is not the same, as the complexity of the technology, but they are related.

Responsibilities and obligations of the supplying party

Whether the Hungarian enterprise is the supplying or the acquiring party, it is aware that the international flow of technology can only be maintained if the legitimate interests of both parties are observed. The Hungarian supplying party is generally responsive to the requirements presented by the socio-economic system and culture in which the acquiring party operates. Hungarian enterprises prefer to use locally available resources if they can be used economically. As far us unpackaging is concerned, Hungarian enterprises are generally aware of the advantage offered by turnkey projects if fairly priced. While cooperation does not lend itself usually to unpackaging – lest the whole deal falls apart – it is a suitable vehicle for the various performances and counter-performances to be priced separately. The latter corresponds to the Hungarian practice.

The provision of information is one of the key questions in any technology transfer. Since the transfer is an act – or rather a series of acts – of communication, it is necessary for the supplying party to overcome all obstacles that are a barrier to effective communication. For cooperation to be successful the flow of information must be a continuous process. In the Hungarian experience the decisive factor is not only access to information but also its proper organization at the receiving end.

It is often considered the supplying party's responsibility that the technology should be appropriate to the receiver's conditions. Obviously the maximum that can be

expected from the supplier is his guarantee that if the technology is properly used it is suitable to meet the requirements which are set forth in the agreement. The Hungarian practice usually is to spell out quite clearly the responsibilities of the supplier and their limitations. In this respect the superiority of cooperation agreements over other transfer mechanism is obvious. The obligation of the technology supplying party to accept or purchase products produced by the acquired technology for its own use or distribution provides the acquiring party with a much more easily enforceable warranty than any other legal obligation or guarantee. It makes the supplying party directly interested in the success of the transfer, and in case of failure places on him the onus of proof that the cause for such failure is to be sought with the acquiring party.

The rights of the supplying party to the technology and to its transfer and that it does not infringe on the rights of third parties should be spelled out in the agreements. Hungarian law does not necessarily imply this obligation of the supplying party, and it is therefore a practice to put a "hold harmless" clause into the contract, obliging the supplying party to support the defence of the acquiring party against claims from third parties, and in case of loss compensate the latter.

As far as access to improvements is concerned, in Hungarian practice any licence agreement must usually contain a provision for including all improvements to the product made by the licensor during the term of the licence. This obligation is often reciprocal.

Responsibilities and obligations of the acquiring party

It is not a general requirement that imported technology must be patented in Hungary, the existence of a patent, however, increases the market value of a technology. Hungarian courts give full protection to patents as well as to the rights of any licensor safeguarded in the contract whether the technology is patented (patentable) or not, including stipulations preventing the diffusion of the know-how gained by the licensee. Secrecy clauses must, however, have a time limit. Confidential information received for the purpose of the evaluation of a potential partner's technology also enjoys protection. The supplying party may also maintain ownership of the documentation it has supplied and this may have to be returned on expiry of the contract.

There are three circumstances in which the observation of proper quality standards by the acquiring party cannot be indifferent to the supplying party. The first is the case where the agreement includes the use of the supplier's trade marks or trade names, and the lowering of the standards may injure the supplying party's goodwill or reputation. The second case is where the supplying party receives part of the product turned out in cooperation. The third case is where the observance of instructions to be followed in the manufacturing process, as laid down in the contract, is a condition of the warranty given by the supplying party.

Changes made to the detriment of the quality of the cooperation product must not be concealed as "improvements", but as far as genuine improvements are concerned, the

Hungarian partner's development activities relative to the technology acquired cannot usually be restricted, the contract should however regulate how the result of such development activities will be handled.

Restrictive practices

Hungarian enterprises are against restrictive practices in principle, but recognize that in view of the legitimate long-term interests of the parties some restrictions accompanying a technology transfer may be fair and equitable.

Prior to importing a particular technology, it is customary in Hungary to compare it with a minimum of two other alternatives, but it is not unusual for a Hungarian acquiring party to commit itself not to enter into a cooperation agreement with any other firm relating to similar or competing technologies and to *deal* – concerning the cooperation product group – *exclusively* with the supplying party.

Arrangements *prohibiting* the Hungarian licensee from undertaking *research* and development in respect of the technology acquired are virtually non-existent, and Hungarian licensors do not impose such conditions either.

It is important for Hungarian enterprises to obtain *access to markets* which make production on an economical scale possible. This motivates them when agreeing to a certain division of markets, in addition to a possible avoidance of the cooperation having an adverse effect on the country's balance of payments in the long term. These considerations usually result in an arrangement whereby some markets are open to the licensor only, some to the licencee only, and some to both. Often the arrangement is not hard and fast, but permits exceptions subject to prior approval. There are also agreements which provide for joint marketing in some countries.

Exclusive *grant-back provisions* in respect of improvements arising from the acquired technology are not usually acceptable in Hungary.

Regulation of prices to be charged by acquiring parties in the country to which the technology was transferred is not practised by Hungarian enterprises. In cooperation contracts it is obviously necessary to set prices or price formulae on the goods and services which the parties are to provide to each other, or which they are going to sell jointly.

Exclusive sales or representation agreements are more often than not part and parcel of cooperation agreements, and as such are not considered objectionable in Hungary.

While it is advisable to separate, as far as possible, the licence agreement from a contract of continuous raw materials delivery, *tying arrangements* are not uncommon in cooperation agreements, especially where coproduction is involved. The continuous supply of parts or semi-finished products may even be the principal motive inducing the Hungarian or the foreign partner to cooperate and to transfer technology within the cooperation.

Adaptation of the technology to the environment and requirements of the acquiring party is a desirable goal in any technology transfer, and *restrictions on adaptations* are accepted or demanded by Hungarian enterprises only inasmuch as these may affect the delivery obligations of the acquiring party undertaken in the cooperation agreement.

As far as *payments and other obligations after expiration of industrial property rights* are concerned, there is no regulation in Hungary for the duration of a licence agreement. The Hungarian practice concerning *restrictions after expiration of arrangement* is not uniform. In cases where this seems justified, it happens that the acquiring party commits itself not to continue to produce or to imitate the licenced product for a limited period after expiration of the contract.

Limitations on volume of production under licence are very unusual, the parties to a cooperation contract being usually interested in extending the scope of their cooperation as much as possible.

In the *use of quality controls* Hungarian enterprises strive for an equitable balance in the cooperation agreements between the stipulated quality control and the responsibility for the quality of the products produced by the transferred technology. The desirability of adequate quality control by the licensor is generally recognized.

Obligation to use trade marks is left to the discretion of the parties. Hungarian enterprises are usually willing to use the trade mark of the licensor, but on the other hand do not deny the licensee the right to use his own trade mark.

Export controls are considered an objectionable form of restrictive practice, since they tend to preserve inequalities in the level of technical development and national monopolies in some technologies even where the would-be supplying party considers it to be in its interest to share the technology in question.

Case study "A"

A cooperation agreement was concluded in 1970 by the Hungarian foreign trade enterprise Technoimpex, on behalf of the Danuvia Central Tool and Appliance Factory, and the G. L. Rexroth GmbH domiciled in the Federal Republic of Germany for the purpose of introducing in Hungary the manufacture of modern hydraulic transmission and control systems. In 1976 the agreement was extended to cover the Rexroth subsidiary Hydromatik GmbH, in 1978 to include the Újpest Engineering Component Factory, and in 1980 to the French Rexroth subsidiary Sigma and the further member of the Rexroth group: Lohmann u. Stolterfoth. In certain respects the Polish enterprise Petzel was also included in the cooperation in 1973.

The agreement covers cooperation in the manufacture of hydraulic devices, the development of hydraulic devices and systems, the sale and after-sales servicing of complete hydraulic equipment. The scope of the agreement is the Rexroth-programme including future additions to it, the devices and components which Danuvia manufactures according to Rexroth-documentation, marketing in Hungary and other countries.

The cooperation contract includes a licensing agreement which enables and authorizes Danuvia to manufacture some important elements. The licensing of the manufacture of further types is a continuous process. While the cooperation agreement was originally valid for six years, the parallel licensing agreement ran for seven years. Rexroth transferred the manufacturing and sales licence to Technoimpex for the products listed in an annexe and committed itself to provide the same documentation as for the devices to be manufactured for Rexroth in cooperation. For Hungary the licence is exclusive, and non-exclusive export rights are accorded for the areas specified in the cooperation contract. Rexroth committed itself not to grant further licences for the licenced products in three countries, subject to Technoimpex reaching a certain minimum turnover in these (Eastern) countries. Both the licence fees and deliveries from the Rexroth-programme are paid for in resultant products.

Technoimpex is excluded from a considerable number of markets and has obtained non-exclusive export rights to others, the latter being mainly Eastern and developing countries. There is no limitation on the exporting of the licenced products as components of machinery and equipment, or as replacement parts for the latter. On the other hand, Technoimpex has agreed not to enter into any other cooperation agreement in respect of the hydraulic products covered by the agreement. Technoimpex also committed itself not to copy Rexroth products, this obligation being in force for a further three years after expiry of the contract. As may be seen, a number of provisions are built into the contract to protect the supplying party's technology.

Terms of delivery and guarantees are specified in accordance with the General Terms of Delivery for exported machinery and equipment recommended by the ECE in 1953. As far as documentation is concerned, Rexroth committed itself to make available the complete know-how for the devices to be manufactured for Rexroth and guaranteed that the documentation included all data which were necessary to manufacture products which were equivalent to those made by Rexroth. Rexroth remains the owner of the documentation. On termination of the contract Technoimpex will return to Rexroth all documentation received, with the declaration that it has only been used for its own manufacturing purpose.

For the know-how and sales rights Rexroth receives from Technoimpex after all devices that the Hungarian party manufactures and does not deliver to Rexroth three per cent of the selling price set out in the Rexroth price list. This know-how fee is credited to Rexroth interest-free semi-annually, and against this credit Rexroth buys from Technoimpex components and devices. For the licence agreement Technoimpex credited Rexroth with a lump sum on the transfer of the documentation and thereafter a royalty which is graduated according to the turnover, a minimum royalty also being provided for each year. The credits can be used in the same way as those for other cooperation products.

The technical assistance is specified in the contract by persons per month in each direction, and in the extension to the contract covering Hydromatic by persons per day.

Both parties committed themselves to informing each other without delay of all improvements to the licenced products. Patentable inventions may be registered by the inventor, but should he not wish to do so, the other party is entitled to register the patent. The patents so registered may be used by both parties free of charge.

The parties are not permitted to transfer to others the rights which they derive from the contract.

Deliveries in both directions were rather constant during the validity of the contract. The new contract concluded in 1980 foresees a doubling of the value of annual deliveries for the years 1981–85.

The cooperation contract had originally a duration of six years, was twice extended, and a new contract to continue the cooperation for a further five years was concluded in 1980. This speaks for itself as far as the success of the cooperation and the satisfaction of the parties are concerned.

Case study "B"

Parties to the agreement are Medimpex Hungarian Trading Company for Pharmaceutical Products, Chinoin Chemical and Pharmaceutical Works Ltd., and Hindustan Antibiotics Limited (HAL), (Medimpex being the Hungarian foreign trade company specializing in pharmaceutical products, Chinoin an old-established Hungarian manufacturer of pharmaceutical products, and HAL one of the two large Indian pharmaceutical manufacturers belonging to the public sector).

The Indian pharmaceutical industry has been developed in the last thirty years. While in the early years the industry depended entirely on imports of bulk drugs that were used in the manufacture of formulations, today the industry manufactures both bulk drugs and formulations, and while some bulk drugs are still imported, India is today a net exporter of pharmaceutical products. The agreement which covers the transfer of the Gentamicin technology makes India self-sufficient in a fundamental antibiotic, and makes supply at a considerably lower price possible than when it was imported from the multinationals.

Under the terms of the agreement made in 1978 after negotiations lasting three years, Medimpex sells to HAL Gentamicin sulphate and its intermediates, and HAL in order to manufacture and formulate Gentamicin and its intermediates buys from Chinoin the strain and the licence to use the technical know-how which Chinoin owns and possesses. The agreement remains in force for five years from the "effective date", this being the day on which both governments had approved the agreement.

The transfer was effected in three phases, and annexes to the agreement specified in detail the documents that were to be handed over in each phase. These obligations were fulfilled on time. HAL is entitled to formulate the Gentamicin sulphate into dosage and sell them in India and other countries to be agreed upon. The same export provisions apply after bulk manufacture has been established at Pimpri, in India. HAL has committed itself not to permit any other party to exploit the know-how transferred to it by Medimpex/-

Chinoin. The obligation of HAL to keep the strain and technological know-how secret applies for five years after the effective date. All improvements to the strain and the manufacture of the product or the intermediates made by either party during the validity of the agreement are to be offered to the other party.

HAL has obtained the right to distribute the product and its formulations under its own trade name.

The agreement provided for demonstrations in several stages. Accordingly, the demonstrations on an industrial scale were carried out at Chinoin's premises, the laboratory demonstration and the experimental industrial demonstration in India. The Hungarian party also assisted HAL in the designing of the plant, and as this paper is being written the plant is being mounted in India. The number of personnel to be delegated mutually for the training resp. learning process is also spelled out in full detail in the agreement.

The results of all demonstrations have surpassed the warranted technical specifications in every case, and the best proof of the success and satisfaction of all parties is perhaps that negotiations have already been started for cooperation in respect of several other technologies.

Conclusions

From the Hungarian experience described above, the following conclusions may be drawn:

Industrial cooperation including technology transfer has brought practical results to the Hungarian economy and to the countries the firms of which have engaged in such cooperation with Hungarian enterprises, even if these results are difficult to quantify.

Although the number of agreements testify to some flow of information regarding the availability of technologies and the conditions of their transfer, improvements to the storage and flow of such information still demand the development of adequate communication structures.

During slow market growth and other less favourable economic conditions the willingness of Western firms to sell technologies to the East may be reduced for fear of creating new competitors. The simultaneous increased competence of industries in the East (including Hungary) may give rise to new forms of cooperation requiring more equal technological inputs from the two sides.

Technology transfer in all directions will be furthered by a "Code of Conduct" if this code leads to an increase in the amount of technology transferred, and to technology being transferred in a more efficient and equitable way.

Technology transfer within industrial cooperation does not necessarily involve intersectoral or two-phase cooperation (sell-back agreements) but possibly and preferably intrasectoral cooperation or functional differentiation (coproduction), a true division of labour.

While two-phase cooperations necessarily lead to a transitory indebtedness of the acquiring party, and their prevalence has thus contributed to the reported debt of East to

West and South to North, industrial cooperation has on the whole fostered the expansion of trade, and in the case of Hungary, at least, it has demonstrably improved the balance of payments.

East–West cooperation has increased economic interdependence. Whether one welcomes or regrets this fact is a matter of political approach but is nonetheless indubitable.

It has become clear that there is no incompatibility or contradiction between regional integration and inter-system cooperation; both are the established practice of the Hungarian economy and of the enterprises developing their own production strategy and product pattern within this economy.

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РОЛЬ ПЕРЕДАЧИ ТЕХНИЧЕСКИЙ ДОСТИЖЕНИЙ В КООПЕРАЦИОННЫХ ДОГОВОРАХ

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Исходя из целей венгерской политики в области передачи технических достижений, автор рассматривает процесс согласования национальных и международных аспектов. Он излагает мотивы, которыми руководствуются венгерские предприятия при закупке и передаче технических достижений.

Из возможных механизмов передачи технических достижений венгерские предприятия обычно отдают предпочтение промышленному кооперированию, так как это дает гарантию выполнения стороной-поставщиком технологии взятых на себя обязательств и обеспечивает удовлетворительное использование предоставленных технических достижений. Другие причины: влияние кооперирования на расширение торговли и выравнивание платежного баланса. Передача технических достижений является существенной частью большинства заключенных венгерскими предприятиями кооперационных соглашений и является как косвенным, так и непосредственным фактором стимулирования торговли.

Далее автор переходит к ряду конкретных исследований кооперирования между Востоком и Западом, проведенных в разных странах, включая проблему передачи технических достижений. Соглашаясь с одними положениями этих исследований, автор спорит с другими. Выделяя важнейшие вопросы, выдвинутые ими, автор излагает венгерский опыт и точку зрения на формы передачи технических достижений, ответственность и обязанности сторон, принимающей и передающей технологию, а также на практику ограничений. Автор знакомит с двумя конкретными исследованиями. В первом описывается опыт передачи Венгрии технологии в области машиностроения, разработанной в ФРГ, а во втором — передача разработанной в Венгрии технологии в области фармацевтической промышленности Индии.

Статья приходит к выводу, что кооперационные соглашения были в большинстве случаев полезными и успешными в деле передачи технических достижений и содействия разделению труда в области НИОКР. В целом промышленное кооперирование проявило себя как подходящий механизм передачи технических достижений между странами с различным политическим и экономическим строем.

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PERIODIC VERSUS CONTINUOUS GROWTH

It has been subject to many discussions in recent years that the socialist economy is not free from certain periodicity. Many experts find in this one or the main reason for economic difficulties. The article challenges this view, proving that periodicity cannot, in itself, be a cause of troubles. Using a simplified growth model the authors prove that, assuming constant capital efficiency, maximum total consumption is not yielded by continual smooth growth within a given plan period, but by such investment policy which invests the possible greatest amount in the first part of the period and then compensates it in the second part with a strong growth in consumption. How long such forced investment policy has to be continued depends on capital efficiency and on the time horizon.

The axiom of periodicity and continuity

It has been for long a cause of controversy that the socialist economy is not free from certain periodicity.* There are various types of periodicity distinguishable in the development of a socialist economy:

1. First of all, there are certain periods in the economy when fundamental changes take place in the basic trends.

a) Such are for example periods that may be characterized by massive socio-economic structural changes. In case of Hungary such periods are:

- the period of industrialization;
- the period of the socialist transformation of agriculture;
- through demand for jobs periodicity in employment (abundance or shortage of labour) is connected with demographic processes;
- the "infiltration" of fluctuations in the business conditions on the world market into the Hungarian economy which is rather open due to the foreign trade, can be mentioned with more or less justification.

b) If we regard the subsequent changes in technology taking place at ever higher levels, we can distinguish periods somewhat similar to those mentioned above which are, yet, different from them:

– In connection with computers it is widely accepted to speak of the application of their first, second, etc. generations. It is not only computers that have subsequent generations representing certain quality differences, but partly in connection with what

*The idea has been raised by *P. Erdős* that the paper of I. Virág [11] implicitly contains the proof: periodic (stagewise) growth might result in a higher level of consumption than a continuous one. This theorem was the starting point of the article.

was said above this can be observed in the whole production process. Mechanization replacing manual labour, then automation covering the whole or part of the production process or fully automated production control mean newer and newer technical generations in the various branches of production. Since these technologies come about in subsequent periods (stages), conditions for their massive application are created also in periods. These elements indicate newer and newer periods (stages) in production and their influence extends beyond production itself to the whole of the reproduction process (the infrastructure), too.

– Periodicities following from the obsolescence of the means of production, primarily of fixed capital are connected with the appearance of technological generations but they are not entirely identical with them.

2) The periods discussed so far seem to be self-evident, natural. However, simultaneously with them there appear such periodic changes in production which seem to be less evident.

a) Such are for example conflicts arising from time to time between demand and production which are not to be mistaken for the traditional conflict between production and consumption in a western economy. For the point is not that production exceeds consumption demand (or effective demand) but the other way around: production is unable to satisfy (often unreal) consumption and investment requirements.

Of the various causes of conflicts the following ones are well known to planners:

– inadequate allowance for the multiplier effects of investments already started;

– a specific manifestation of this is inadequate recognition of regularities inherent in the technical-economic structure of investments;

– insufficient (self) adjustment of real and financial processes to each other or unsatisfactory knowledge of the conditions of this adjustment.

b) Certain periodicities may arise from contradictions within the system of economic control and management. Such may be:

– too optimistic (or too pessimistic) evaluation of the expected development of external or internal business conditions;

– partial lack of harmony between plans and the mechanism necessary for their implementation;

– deficient planning due to inadequate allowance for external and internal (not necessarily economic) processes (for example wrong forecast of the relaxation or increase of political tension, or ignoring the role played by the "second economy");

– insufficient exploration of interdependencies between economic and social processes (for example between changes in the way of life and economic growth).

This enumeration also shows, although it does not aim at completeness, that we have analysed and are analysing many factors in connection with periodicities that have manifested or are manifesting themselves in Hungarian economic growth, especially in connection with the production and investment cycles.

It is far from being surprising that the terms periodicity or cycle carry almost unambiguously pejorative connotations in these analyses. We want to eliminate mistakes

and disturbances and cycles are indeed disturbing factors in most cases. However, frequently we wish or believe to find all the causes of our economic troubles right among these cyclical phenomena and the question is not even raised, whether periodicity is always, unambiguously and necessarily detrimental.

No doubt we are not short of arguments. Periodicity in investment leads alternatingly to an overutilization of capacities or to the emergence of idle capacities. This reduces efficiency in realizing investment projects or it may render obsolete equipments which were modern at the moment of planning, it generates abrupt demand for investment goods, raw materials, labour, etc. These arguments and those not mentioned here are so much self-evident that those economists who try to fit the theory of their specific field into a system, include, as a rule, the assumption or the need for a continuous (steady) flow of processes among the underlying assumptions, the axioms of the system.

The axiom of continuity appears characteristically as a requirement for example in the theory of planning the standard of living and related areas ([7] p. 161). The model built for the planning of living standards in the course of analyses made for the long term planning of living standards states among the so-called consistency conditions that the growth of living standards should be continuous and in this connection it infers a fundamental relationship concerning the continuous (steady) growth of consumption (F):

$$F(t) = F(o)(1 + r)^t,$$

which naturally means that F(t) should grow continuously at a certain rate every year. This problem was taken up in newer forms by J. *Kornai*'s book [6] discussing already the basic conditions of the whole economic planning and not the planning of living standards.

J. *Kornai* introduces precisely a dozen of his conditions for harmonic growth by mentioning the following need: "The growth of consumption should be regular and continuous." Although he defines the condition of continuity explicitly only for consumption, nevertheless it seems to appear from the whole set of conditions (just like from the consistency conditions of living standards) that in reality the process as a whole should be continuous. This implied condition emerges especially clearly when the following condition is defined as a consistency condition for living standards: "The growth of living standards should be in harmony with the whole of economic growth". It is already clear from this (compared with the first consistency condition) that the whole economic growth should be continuous which is defined in the following form:

$$Y(t) = F(t) + J(t),$$

i.e. at any point of time national income is equal to the sum consumption and accumulation, then

$$Y(t) = Y(o)(1 + r)^t = F(o)(1 + r)^t + K(o)(1 + r)^t.$$

Is the assumption of continuous growth a by all means necessary condition? Let us examine in a simple model what kind of growth we have if we drop the axiom of continuity and the maximum level of consumption is regarded as the optimum criterion!

This model – as it will be shown later – presents a very simplified picture of reality, however it permits to develop our idea in an explicit manner. To avoid misunderstandings, we want to mention it in advance that – as far as the basic point is concerned – we regard our ideas presented here as valid also beyond the limits of the model and the analysis with the aid of the model is treated here as an illustration of our ideas.

The growth model

Let us set out from the following assumptions in defining our model:

1. Let us assume at the beginning of the planning period, at point $t_0 = 0$, that the quantity of capital available in the economy is $K(o) = K_0$.

2. Let us assume that the national income produced at t point of time Y(t) is proportional to the capital stock at t point of time K(t):

$$Y(t) = cK(t),$$

where c, the coefficient of capital efficiency is non-negative and *constant over time.*

3. Let us denote investment or accumulation policy as a function of time by s(t) the value of which at a fixed t point of time is the rate of investment belonging to this moment of time. A given investment policy indicates what proportion of the national income can be allotted to accumulation at various points of time. Obviously $0 \leqslant s(t) \leqslant 1$, for every value of t. Let us assume that s(t) proportion of the national income can be allotted to J(t) investment at every point of time.

$$J(t) = s(t)\, Y(t).$$

4) Beyond this let

$$J(t) = K'(t).$$

This equation indicates that investment increases the capital stock immediately, since there is no time lag in the model.*

It is an obvious limitation of our model that it lacks a labour force variable and implicitly assumes that labour is available in the required quantity and quality.

*It follows from the above four conditions that

$$K'(t) = s(t)\, cK(t)$$

the solution of the resulting differential equation, using the initial condition $K(o) = K_0$ is the following equation:

$$K(t) = K_0 e^{\int_0^t cs(\tau)d\tau}$$

Total consumption and the optimal accumulation policy

At any point of time s(t) times the national income is allotted to accumulation, consequently 1–s(t) times national income to consumption. Thus over a period T total consumption is

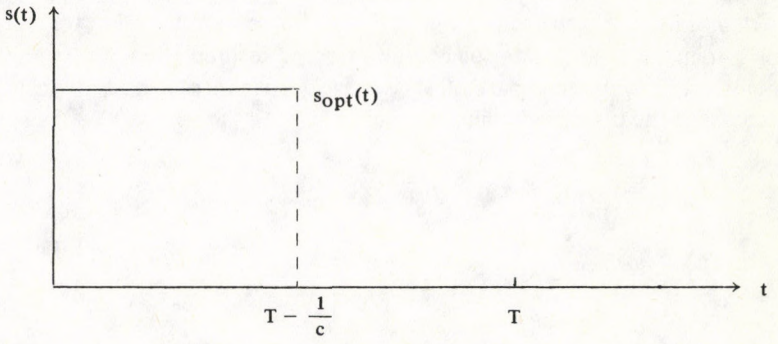
$$F[s(t)] = K_0 \int_0^T [1 - s(t)] e^{\int_0^t cs(\tau)d\tau} dt .$$

The task consists in determining the values of function s(t))$[0 \leqslant s(t) \leqslant 1]$ under which this function (consumption) assumes its maximum value.*

This optimal investment policy which results in the highest possible level of consumption over a period of time is described by the following function:

$$s_{opt}(t) = \begin{cases} 1, \text{ if } t \leqslant T - \dfrac{1}{c}, \\ 0, \text{ if } t > T - \dfrac{1}{c}. \end{cases}$$

Chart 1



*The reader is requested to do without the details of the computations. The present paper is destined primarily for readers with no specific interest in mathematics and it may be feared that a detailed proof would scare just them off. Otherwise the result has been published in [11]. According to this:

$$s_{opt}(t) = \begin{cases} 1, \text{ if } t \leqslant T - \dfrac{1}{c}, \\ 0, \text{ if } t > T - \dfrac{1}{c}. \end{cases}$$

If, however, $cT < 1$ then $s_{opt}(t) = 0$

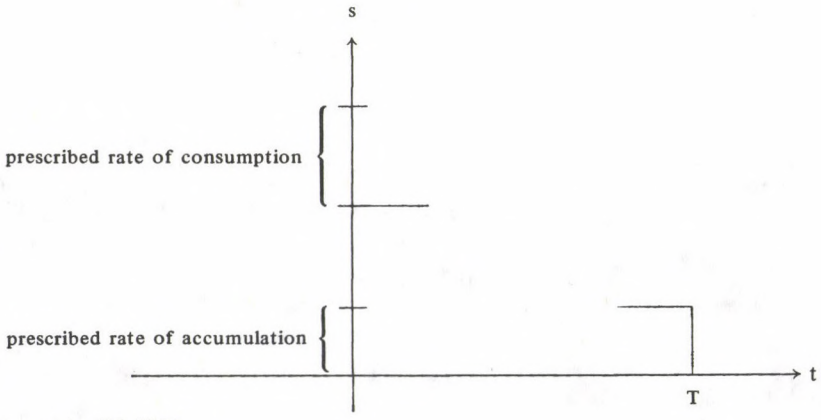
In verbal terms this result amounts to the following: for a finite period of time T the optimal accumulation policy (optimal in the sense that total consumption reaches the maximum level) is 1 for a while (i.e. to invest everything) then 0 (i.e. to consume everything). The point where accumulation becomes 0 depends on the constant T, the time horizon and on the coefficient of capital efficiency c. The larger the capital efficiency coefficient becomes, the further the point of time is shifted from which on the value of optimal accumulation policy is zero with a given T.

Consequently, according to the optimal accumulation policy – if we considered a finite interval only, disregarding everything apart from this – first we should accumulate everything and consume everything afterwards.

If now optimal accumulation policy is determined according to similar principles for the interval between T and 2T, then between 2T and 3T etc. (for consecutive planning periods of T length), with this procedure a constant periodicity is obtained, meanwhile total consumption is maximized in every individual case. For example in case of five-year planning (T =5) and with a capital efficiency c = 0,25 according to the optimal policy in one year we invest everything to consume everything in the following four years. If this is repeated in every plan period, even with a different capital efficiency, the rate of investment shows cyclical fluctuations together with national income and consumption. Naturally the result is such an extreme one only in this simplified, abstract model. A computation closer to reality – allowing for a greater number of factors – would reflect this fact in such a manner that the rate of accumulation would be high at the beginning of the period and low at the end of it even the transition would not be so sharp.

It is easy to prove that the periodic character of the optimal accumulation policy would not change even if some lower limit were set for the consumption for example by determining a minimal growth rate for consumption or accumulation. For in this case all what happens is that only that part of accumulation becomes periodic which permits consumption above the prescribed minimal level.

Chart 2



We have seen so far that if the rate of accumulation may change from time to time within the plan period then in an optimal case it changes in the manner shown above and this investment policy leads to cyclical fluctuations in consumption and in the national income.

Let us see therefore, what the optimal accumulation policy is if we stipulate that rate of investment cannot be changed at least within the plan period!

In this case the task consists in determining an optimal rate of investment valid (constant) for the whole plan period. The computations are omitted here because of their lengthyness but they can be found in [12].*

In view of what was said above it may not be surprising to say that the optimal constant rate of accumulation (s_{opt}) depends again on the capital efficiency (c) and the time horizon (T).

With the optimal rate of accumulation known we can draw conclusion in the model concerning the optimal growth rate of the national income Y(t). Perhaps it is already clear that this growth rate of national income can be regarded as optimal in the

*In this case our model is simplified according to the following: the equations (see p. 678) remain unchanged except for the third one. Instead we stipulate that

$$J(t) = sY(t),$$

where s is constant over time and $0 \leqslant s \leqslant 1$ obviously holds, too.

It is easy to see that if instead of an s(t) changing over time a constant s is introduced everywhere in our model, the maximum of total consumption over T period of time means finding the extreme values of the following function:

$$F(s) = K_0 c(1-s) \int_0^T e^{sct}\, dt .$$

This can be performed in the following comfortable form:

$$F(s) = \begin{cases} K_0 cT , & \text{if } s = 0 , \\ K_0 \left(\dfrac{1}{s} - 1 \right) (e^{csT} - 1), & \text{if } 0 < s \leqslant 1 . \end{cases}$$

Because of their lengthyness the computations are omitted also here, they can be found in [12].

We have pointed out in the same place that the optimal rate of accumulation s can be determined for any parameter values. These parameters are the capital efficiency coefficient c and the time horizon T on which the optimum depends in the following manner:

If $cT = 2$ the optimum is just at $s \leqslant 0$ point, if $cT > 2$, then it is somewhere beetween 0 and 1 but, depending on the size of cT, always in a different place.

In [12] an estimate is given for the value of s_{opt}:

$$\frac{cT-2}{cT} < s_{opt} < \frac{cT-2}{cT-1}$$

sense that within a plan period of given length T this growth rate permits to achieve the highest possible level of consumption.

It should be seen that in case the rate of accumulation is constant over the whole plan period, the growth rate of the national income is also constant, while in the former case both are changing over time. Therefore, in order to be able to compare the two variants of accumulation policy, some average growth rate should be determined for the first case.

Comparison of continuous and periodic growth

The technique of investigation here is that the continuous growth rate of the national income produced by the optimal, constant accumulation policy (s_{opt}) is compared with that belonging to the optimal periodic accumulation ($s_{opt}(t)$).

The growth rate α, as usually interpreted, can be determined by the equations of the model that may be defined for a constant rate of accumulation in the following form, using the notations of the model:*

$$\alpha = \frac{Y'(t)}{Y(t)} = sc\,.$$

If the rate of accumulation is not constant over time, but changes as a function of time, then on the analogy of the above exposition the growth rate also changes over time:

$$\alpha(t)=cs(t),$$

however, the rate of growth is determined even in this case by capital efficiency (c) and accumulation policy s(t). In this case, however (if accumulation policy is variable) let us

*Since $Y(t) = cK(t)$, thus $Y'(t) = cK'(t)$.

It can be seen that $\alpha = \frac{Y'(t)}{Y(t)} = \frac{K'(t)}{K(t)}$.

According to computations presented in the first footnete (p. 44)

$K'(t) = scK(t)$, consequently $\alpha = sc$.

Thus, the growth rate of the national income is constant over time and its size is determined by the capital efficiency c and the rate of accumulation s.

take the average growth rate for the period T which is defined as follows:

$$\overline{\alpha(t)} = \frac{\int_0^T cs(t)\,dt}{T} .$$

The optimal average growth rate is obtained so that the optimal accumulation policy $s_{opt}(t)$ is substituted in the above formula.* Finally we arrive at the result (see footnote below) that the optimal constant growth rate is smaller than the average one belonging to the periodic investment policy:

$$\alpha_{opt} < \overline{\alpha_{opt}(t)}$$

Thus a periodic (optimal) accumulation policy ensures a higher growth rate of the national income than a rate of accumulation which is constant over time.

*Through substitution we obtain that

$$\overline{\alpha_{opt}(t)} = \frac{1}{T} \int_0^{T-\frac{1}{c}} cdt = \frac{cT-1}{cT} \cdot c .$$

So the average optimal growth rate is a function of the capital efficiency and the time horizon. If accumulation policy cannot change over time, than $s_{opt}(t)$, optimal rate of accumulation valid for the whole period should be substituted in the following formula:

$$\alpha = cs$$

The optimal growth rate then is

$$\alpha_{opt} = cs_{opt},$$

but it is known that

$$s_{opt} < \frac{cT-2}{cT-1} .$$

Consequently, the optimal growth rate is

$$\alpha_{opt} < c\,\frac{cT-2}{cT-1}$$

Since obviously

$$\frac{cT-2}{cT-1}\,c < \frac{cT-1}{cT} \cdot c = \overline{\alpha_{opt}(t)} \text{ holds,}$$

hence

$$\alpha_{opt} < \overline{\alpha_{opt}(t)}$$

One might think that this is all so at the expense of deteriorating conditions at the end of the plan period, consequently, with a changing accumulation policy the situation is less advantageous since the accumulated capital is used up. It is important to note that when implementing a periodic (optimal) accumulation policy at the end of period T the situation is more favourable in respect of capital available for the start of the new stage, since a greater stock of "starting capital" is available than under a rate of accumulation constant over time for the start of a new plan period of T length.*

*Let us take the following equation

$$K(t) = K_0 e^{\int_0^t cs(\tau)\,d\tau}$$

by substituting T let us determine the capital stock at T point of time:

$$K(T) = K_0 e^{\int_0^T cs(\tau)\,d\tau}$$

Let us substitute first the optimal accumulation policy

$$s_{opt}(\tau) = \begin{cases} 1, \text{ if } 0 \leqslant \tau < T - \dfrac{1}{c}, \\ 0, \text{ if } T - \dfrac{1}{c} \leqslant \tau \leqslant 1 \end{cases}$$

to obtain

$$K(T) = K_0 e^{cT-1}.$$

If we substituted constant s_{opt} then according to the already described estimate

$$s_{opt} < \frac{cT-2}{cT-1},$$

$$K(T) = K_0 e^{\frac{cT(cT-2)}{cT-1}} \text{ would hold.}$$

Since

$$cT - 1 > \frac{cT(cT-2)}{cT-1} \qquad \text{if } cT > 1$$

$$K_0 e^{cT-1} > K_0 e^{\frac{cT(cT-2)}{cT-1}}$$

Evaluation of our results

Let us sum up our results!

In case of an optimally chosen periodic investment policy in a finite plan period

a) total consumption that may be realized over the whole period is greater,

b) the growth of the national income over the whole period is also greater,

c) the capital stock available at the beginning of the new period is also larger.

However, this implies that the growth rate of consumption optimal in this sense is not constant over time. Hence it can be seen from the investigations with the model that in order to make growth continuous we have to give up a certain amount of consumption.

Nevertheless, this does not imply that any kind of non-continuous growth rate would ensure a higher level of consumption than any kind of a continuous one. It is only the optimally chosen periodicity ("cycles" if you like it) that provides this result. Moreover, if this periodicity is not optimal, even the advantage can be lost which is ensured by some good previous investment policy for the start of a new period.

Without exaggerating the importance of investigations with the model, we think that it is still possible to draw one lesson from them.

Although it is desirable from many aspects, the growth rate cannot and should not be planned necessarily as constant over time since it may also happen (and this is shown by the investigations with the model) that some growth rate which is not continuous – but optimal in a certain respect – can be on average larger than the one optimal in the same respect but originally planned to be continuous.

The key to the question in this model is the control of the investment policy. It is very important to point out that it is on this that the opportunity for growth depends in the final analysis. If the rate of investment is kept low for too long, the consequence may be that all our future growth slows down.

To avoid misunderstandings, we have to say that it does not follow from our model that a forced accumulation policy can be carried on for as long as one wishes. From one side accumulation is limited by the absorptive capacity of the national economy. From the other side, however, if the investment stop lasts for too long, there is a danger, that not only the results of preceding investment are used up, but the new period of reconstruction is started under less favourable conditions. From the statement that periodic growth is not necessarily bad, moreover, it may be optimal in a certain respect, it does not follow that any cycle in investment policy is good. If, for example, investment is stopped right in the middle of the reconstruction period (in the middle of the period of sustained investment growth in our model), it surely will not be optimal and will not result in an optimal level of consumption or in a higher level than in case of continuous growth. On the other hand, if we do not stop restricting accumulation at the end of the period, not only the results of capacities created by earlier investment are used up but the renewal funds of these capacities may also be destroyed. In such a case the new stage cannot exceed the preceding one, everything has to be started from the very beginning.

Thus, there are two key questions of optimizing consumption. One of them is the choice of the time horizon and the other one is capital efficiency.

It is a weak point of the result that it says nothing about what can be regarded as an ideal plan period. The answer to this question is to be found outside of the model. It is not for the first time that this question has been raised, but in fact it is a special case of the general problem of time horizon. The solution has been looked for in various directions by many. For example Strumilin proposed 40 years as time horizon saying that this was about the length of economic activity of a generation. Others, e.g. labour force planners regard the transition period through the school system (15–20 years) as an appropriate time horizon.

Such kind of suggestions seem to be reasonable inasmuch as they try to find an answer to the problem of time horizon in the economic processes and to connect it to the lifetime of productive forces.

However, the trouble lies in that they set out from the lifetime of the labour force or its reproduction cycle. However, investment belongs to the group of means of production and thus we think one should set out from the lifetime of capital goods. However, there is another obstacle here. The group of capital goods is not homogeneous. (Labour force is more homogeneous at least in respect of lifetime.)

First of all the technico-economic composition of investment differs according to the proportion represented by construction or equipment. The lifetime of the former is estimated to be in general 20–50 years and that of the latter 5–15 years.

We do not think that it is possible to give an unambiguous answer to this question under such conditions. Nevertheless, if we accept that in technology periodicity by generations is becoming more and more characteristic of the technico-economic level, it seems evident to try to approach the plan period through the lifetime of technological generations. It would require a deep and large-scale investigation to point out to what extent this periodicity by generations is characteristic of technologies applied in the various branches and what the estimated lifetime of these technologies may be. (We are making here a very cautious, tentative estimate according to which, because of the close connection with computer techniques it may be about 10 years.)

We believe that technico-economic periodicity (by generations) can provide a feasible approach also in respect of changes in capital efficiency and, as far as our conclusions are concerned, this is an easier problem. As a matter of fact, the time horizon is always an artificially constructed variable, while capital efficiency at a given point of time and at a given place is always an actually existing thing, although for the whole country it is always a calculated indicator consisting of various components.

Conclusions

Our final conclusion is a double one.

1) On the basis of what was discussed above we believe it is easy to see that the periodicity of investment activity is not the fundamental cause of our economic troubles. Periodicity in itself is not necessarily condemnable. Periodic planning and periodic investment activity may be explicitly efficient if we are clear about the nature of periods.

2) If, however, mistakes in planning might produce such cycles which disturb planned economy, let us try to reverse this relationship and plan the cycle. Perhaps this proposal is not so astonishing if we consider a few facts.

Although planning always aims at achieving equilibrium of the big aggregates (national income, consumption, investment, development of branches, etc.) and their continuous development (growth) and reckons with exponential growth (determining growth rates), outside of these aggregates it gives up this principle consciously. It does so because

– it is well known that in practice this principle fails to materialize (except for the large aggregates mentioned above),

– it is known from practice that in the field of production and consumption this is not the most effective. And this is the main point!

As far as production development is concerned it has two main ways:

– gradual improvement of production, implementation of minor technological improvements which means (or at least may mean) in fact continuous growth,

– creation of new capacities or complete reconstruction of the old ones which bring about leap-like (sudden) changes in the given product, product group, moreover in certain cases in the whole branch. In this case the leap-like, stage-wise change obviously does not lead to a deterioration in efficiency, quite on the contrary.

The situation is not different in the field of consumption or, in a wider sense, in the field of living standards. One of the consistency conditions of planning living standards is built on the recognition that there is a "threshold of perception" in respect of the growth of living standards, below which the population does not feel any improvement, moreover stagnation or decrease is perceived even if in reality there is a slight increase.

Consequently, in such cases and such fields when and where only a slight growth is feasible over a relatively longer period, it is reasonable to divide the increment into several larger parts. Therefore, the rise in living standards can take place in two ways:

1. Through a constant "smooth" growth of certain elements of living standards: for example a more or less continuous growth of wages and salaries, a year-by-year gradual expansion of the fundamental elements of consumption: clothing articles, household equipments, and services.

2. Through leap-like changes: for example increasing family allowance from time to time by larger amounts (at intervals of a few years) a similar stage-wise improvement of the child care benefit, etc.

Slow, continuous growth in every field can satisfy the requirements of development only for a certain period even in an optimal case. More or less as long as the need for structural changes emerges. As soon as it does a sudden interference becomes unavoidable. The need for such interference is not of the same intensity in every field, continuous growth does not become impossible at the same time in every field. It is this difference in intensity that determines priorities of sudden interference. This is equally true for the growth of production and the improvement of living standards.

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ЦИКЛИЧНЫЙ ИЛИ РАВНОМЕРНЫЙ РОСТ

Я. КОВАЧ—И. ВИРАГ

Уже много лет ведется полемика о том, что социалистическое хозяйство также не лишено определенной цикличности. Многие именно в этом видят одну или даже главную причину экономических затруднений. Авторы полемизируют с этим мнением, доказывая, что цикличность сама по себе не может быть причиной этих проблем. При помощи упрощенной модели роста они доказывают, что в случае постоянного коэффициента эффективности капитала в данном периоде

планирования максимальное общее потребление складывается не в результате равномерного роста, а такой политики накопления, которая в первой части периода направлена на осуществление возможно наибольших капиталовложений, компенсируя затем его во второй части периода усиленным увеличением потребления. Сколько времени следует в таком случае осуществлять усиленную инвестиционную политику, зависит от эффектовности капитала и горизонта времени. Авторам, конечно, хорошо известно, что такая категорическая формулировка в действительности реализуется лишь в ограниченной мере, так как логика такого рода ограничивается прежде всего ресурсами рабочей силы, а также способностью народного хозяйства абсорбировать капитал. Все же им представляется, что изложенные в статье соображения могут быть использованы в народнохозяйственном планировании на долгую перспективу, с учетом технико-экономического жизненного цикла средств производства и циклов модернизации.

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A. GYULAVÁRI

STOCKS AND STOCKPILING IN HUNGARY – – AN INTERNATIONAL COMPARISON

The study analyses the changes in stocks and stockpiling between 1970 and 1978. Comparing the stocks in the Hungarian economy with those in the Federal Republic of Germany, Great Britain, Czechoslovakia and the Soviet Union the author points out that their level is rather high – primarily in comparison with the capitalist countries. It is a characteristic feature of both the socialist and the capitalist countries that stockpiling and production change parallelly in the investigated period. Nevertheless, in Hungary the two factors developed differently from each other. From among the investigated factors stockpiling shows a close correlation with the balance of trade.

Stockpiling, being independent of production and usually different from that, can be taken as an indicator of disorder in the rhythm of the economy and a source of significant losses.

As unambiguous and uniformly accepted it is that stocks are indispensable for management, as uncertain and occasionally different is the judgement of stocks accumulated in the national economy and of yearly stockpiling. It is uncertain because over and beyond the recognition that stocks and also yearly stockpiling are high in Hungary, Hungarian analyses dealing with stocks are characterized by less explicitness and eventually even by contradictory conclusions.

Such very important questions indispensable for the practice as "what stocks are required for the economy? ", "in comparison to what and to what extent are stocks too high or low? ", and finally, "what determines the development of stocks? " have not been answered yet. Progress in this field is indispensable and in certain respects also possible, despite the really deficient and objectionable, and therefore often criticised information system.

Before trying to answer the above questions, without a claim to completeness, but drawing some important conclusions, I am going to summarize those major phenomena and reasons revealed as a result of previous analyses that are reflecting and also producing the present inventory situation and concerning which the majority of those analyzing Hungarian stockpiling agree (the enumeration does not follow the order of importance, but that of the frequency with which the individual reasons are mentioned):

– exaggerated stockpiling by consumers;

– the role of enterprises trading in means of production is insignificant in nation-wide stockpiling;

– excess demand or insufficient supply on the market of producers' goods is closely connected with the two previous factors and also results from them;

– the share of least mobile material stocks – accessible only for the producing enterprise accumulating the given stocks – is very high (these factors are very closely connected, almost follow from each other);

– difficulties of domestic supply: long lead-time, laxity of contractual discipline, stronger position of seller enterprises than that of buyers (sellers' market);

– uneven, jerky deliveries in socialist imports having an important weight in material purchasing, which make it impossible to schedule deliveries;

– elimination of contradictions in inventory management and the transformation of the product pattern also produce temporarily high stocks.

All the above mentioned factors, which really bring about an increase in stocks, force economic organizations to "overinsure" themselves because of the contemporary organizational and institutional system of the economy and management (thus of the economic control and management system).

In my opinion it is necessary to emphasize that inventory management is basically not a national economic, but an enterprise category. At national economic level stocks may be interpreted, they have a very important economic content and signalling role, but demand for stocks and – first of all short-term – changes in it are determined mainly in the enterprise sphere, depending on the development of production. At a given date stocks also depend on the development level of the economy, on the organizational and institutional system. However, changes in these factors and thus a reduction of the demand for stocks of the economy are conceivable only in a longer run. Therefore, national-level stocks (and their development) are considered as an effect determined by the production process. Universal validity of this fact will later be verified by international examples.

My aim was that the indicators used should have an economic content and could be attached to actual current management. Therefore, all data on stocks are given at current prices, while data at constant prices were used only for presenting economic growth. In the description of inventory processes the priority of value processes as against natural-processes is especially justified by the explosion of raw material prices in the middle of the period 1970–1978.

Stockpiling is always interpreted as a form of using output for purposes other than fixed capital formation and consumption, therefore data of national economic production balances (accounts) are used.

When comparing Hungarian data with those of Western countries the particularity of our price system should be necessarily taken into consideration, namely that in Hungary (and in the majority of socialist countries) prices of capital and those of consumers' goods contain net incomes of different extent. This is one of the reasons – and also the general methodological difficulties of international comparisons – why I am going to analyze first of all differences in trends.

The analysis covers the period between 1970 and 1978. However, the statements made hold also in the knowledge of effective Hungarian data of 1979 and expected trends for 1980. In the field examined no real change has occurred.

In the first part of the paper the volume of stocks and its development during the observation period are examined and some commonly accepted – in my opinion imperfect – principles, methodological and practical statements are challenged. In the second part proper starting points in judging stockpiling are looked for. In the mirror of international data and by means of a comprehensive system of indicators I try to show the relationship between stockpiling and economic growth as well as to indicate the major factors determining the volume and development of stockpiling.

Stocks

Stocks constitute the totality of use-values – materials, unfinished, semi-finished and finished products and goods – permanently present in the process of management and indispensable for the undisturbed realization of commodity metamorphosis. According to this notion stocks accumulated by enterprises, cooperatives and budgetary institutions in Hungary amounted to 511.4 thousand million forints on January 1, 1979, at current prices. This absolute figure has no content, no meaning in itself, some conclusion may be drawn at most from its development over time.

An attempt to measure Hungarian stocks by international standards

In Hungary stocks of January 1, 1979 were nearly identical with the national income of 1978 and amounted to more than one third (36.6 per cent) of the national product (both according to MPS). (The question why these comparisons are not too appropriate will be discussed later on.) Stocks amount to exactly one third of the value of the gross national product and to 92.6 per cent of the net national product. The value of stocks accumulated in relation to the value added (GDP) in Hungary, the Federal Republic of Germany and Great Britain,* respectively, is shown in *Table 1.*

Table 1
Value of stocks in relation to the value added
(percentages)

Country	1970	1971	1972	1973	1974	1975	1976
Hungary	79.1	78.0	75.9	72.8	75.8	77.7	78.1
FRG	24.2	24.4	23.8	22.9	23.5	25.4	24.4
Great Britain	.	.	.	32.6	38.1	34.6	35.1

*Sources used in this part: Statistical Yearbook 1978 of the Federal Republic of Germany, those of 1977 of Great Britain and Czechoslovakia, furthermore [1]

The data in the table show that the ratio of stocks related to the value added decreased until 1973 both in Hungary and the Federal Republic of Germany. In 1974 the ratio of stocks increased in all the three countries, in Hungary and in the Federal Republic of Germany even in 1975, which latter circumstance reflects losses in terms of trade suffered by their economies. Prices of raw materials (the value of stocks) increased considerably faster than those of output (the realized value added). The British economy was able to reverse or at least to stop this process already in 1975 (though only temporarily), while the FRG in 1976. The Hungarian economy could stop this unfavourable process in 1977, but only temporarily (since in 1978 the ratio increased again). The relevant Hungarian data were 77.0 per cent in 1977 and 77.3 per cent in 1978.

Though these statements are not differentiated enough (since high stockpiling in Hungary in 1978 had – unfortunately – nothing to do with the changes in raw material prices), my aim was here to indicate the trend and not the exact magnitude. The specific demand for stocks of the economy (here related to the GDP for the sake of comparability) and its development should be continuously observed as an absolutely necessary production input.

Let us now consider the development of stocks related to accumulated assets.*

If the 1970–1976 Hungarian data of *Tables 1* and *2* are examined by themselves, then everything seems to be all right, since the ratio of stocks was continuously decreasing until 1973 and decreased or stagnated even if measured at the end points. For the "running" of fixed assets relatively smaller stocks have been required and also the "stocks-intensity" of a unit of value added decreased between the first and last years of the period examined.

We obtain a completely different picture of Hungarian stocks if we compare them with the corresponding FRG and British data. Though trends of development are

Table 2
Ratio of stocks related to accumulated assets

Country	1970	1971	1972	1973	1974	1975	1976
			In percentage of the net value				
Hungary	24.4	24.1	23.6	23.0	23.1	23.2	23.5
FRG	8.7	8.4	8.0	7.7	7.7	7.8	7.8
			In percentage of the gross value				
Hungary	16.1	16.0	15.8	15.5	15.7	15.9	16.2
Great Britain	.	.	.	7.8	8.3	7.4	8.0

*Here – deviating from Hungarian statistical practice – I call accumulated assets the total of fixed assets and stocks.

similar in these three countries, yet there is a considerable deviation as regards the level of stocks. Though we used bases of comparison with completely different contents, surprisingly identical deviations may be found between Hungary and the individual countries examined. Hungarian stocks amount to about threefold of those of the Federal Republic of Germany and to twofold of those of Great Britain according to both quotients. This deviation is unbelievably great and cannot be understood even knowing the fact that the Federal Republic of Germany has one of the world's most developed economy with an adequate economic organization. The advantage of Great Britain placed considerably lower as regards the level of development is also great in this field.* The existing difference in development level quantified by the GNP may not be directly projected to stocks.

An examination of the Hungarian stocks according to international standards could be carried out only to a more limited extent, related in this case to the MPS national income, with two socialist countries. (See *Table 3*)

From these rather incomplete data there are two things worth mentioning. While in Hungary the ratio of stocks, decreasing until 1973, became stable from 1974 on, practically at the previous 1970 level, a considerable increase of this ratio may be observed both in Czechoslovakia and in the USSR during the same period. As a result of fast stockpiling the ratio of stocks was identical with the Hungarian one by the end of the period in Czechoslovakia while it was considerably less in the USSR, despite a similarly fast accumulation.

Though the comparison, limited altogether to four countries because of the lack of data, is rather uncertain, yet it allows to draw an important conclusion: the level of stocks accumulated for production is very high in Hungary by international comparison. Despite the Czechoslovak stockpiling being similar to the Hungarian one, it seems to be unambiguous that production could be realized also with considerably smaller stocks. Therefore, the reduction of stocks is of primary importance. It is necessary because in the large-scale international exchange of goods, that

Table 3
Ratio of stocks related to national income
(percentage)

Country	1970	1971	1972	1973	1974	1975	1976	1977
Hungary	98.6	97.9	94.1	90.7	97.2	99.0	100.3	96.6
Czechoslovakia	83.1	.	92.1	93.4	94.8	96.8	96.5	101.6
USSR	56.3	.	.	.	.	64.5	65.0	.

*Among the richest countries of the world the Federal Republic of Germany is placed fifth on the basis of per capita GNP in 1978 with 10.400 dollars, while the corresponding data of Great Britain and Hungary were 5.500 and 2.570 dollars.

may be regarded characteristic of Hungary, trade should be realized also with such countries which achieve the same production (value added) with considerably smaller (stock) input. That is a significant source of losses for Hungary in the exchange. The considerable stockpiling resulting in large stocks also directly diminishes the possibility of increasing or keeping at the same level final consumption, fixed capital formation and export. The stocks required for production as input are large by international comparison.

Development of stocks on the basis of the rotation speed

"The indicator of specific stock level with a view to realization is the value of stocks per unit of net sales receipts, and the rotation speed." [2] The formula of the indicator of the rotation speed is the following:

$$\text{ROTATION PERIOD} = \frac{\text{AVERAGE STOCKS}}{\text{NET SALES RECEIPTS}} \times \text{NUMBER OF DAYS IN THE PERIOD}$$

This indicator shows for how many days' input and sales the average stocks were enough in the given period. The rotation period computed in this way was 74 days in 1971, 67 in 1975 and 68 in 1978 in Hungary – on the basis of data supplied by enterprises and cooperatives.

Computation of the rotation period is important – in my opinion – first of all at enterprise and even more at product level, since at this level the content of the indicator may be easily interpreted and it has an effective role in indicating the standards of inventory management. The indicator of circulation computed for bigger aggregates, for example, for the totality of enterprises and cooperatives can no more be linked to any group of products and is rather of an informative character: it supports trends indicated by other indicators. Computation for national level is only of theoretical character since this indicator expresses a great many factors having joint effects. Despite the above, I am going to deal with two problems related to the computation of the rotation period since the method described is used also in practice at present.

Because of relating to net sales this indicator depends on income regulation and even more on changes in that. In years when the ratio of subsidies or taxes to net sales is changing by leaps as compared to the previous year, the result obtained expresses not only the changes in the quality of inventory management. Therefore, gross sales receipts or net receipts corrected for the above changes are more suitable for making the computation. Thus the effect of income regulation disturbing the judgement on inventory management may be eliminated. To raise this problem is topical because with frequent changes in income regulation and minimum changes in the rotation period between 1973 and 1978 the judgement on inventory management is necessarily distorted.

However, judging the development of stocks exclusively from the realization viewpoint means an even greater problem than the one mentioned above. The function of stocks is to ensure the continuity of production, services and turnover. Stocks form a source of sales receipts through the "mediation" of various processes in separable phases of production.

The question raised is shown for industry because in this way the mainly material stocks of the industry may at least be separated from the commodity stocks of trade. In the process of production accumulated stocks become material costs and inputs if they are used up. Therefore, material input is more suitable for determining the rotation period than gross or net sales. In sales such wages and net income elements can already be involved which can not be linked to the circulation of stocks. But the specific indicator computed by "consumption approach" already gives an answer indeed to the question how many times stocks were replaced during the given period, what stock level is required for production, depending on materials needed.

Raising this question is justified by the indicator of the rotation period used at present, because it shows a too favourable picture (the deviation is of a great extent) on the one hand, and also the trend of inventory changes is deviating from that computed on the basis of material input on the other. Therefore, computation should be made in a more differentiated way than at present, according to phases of production (production and turnover), eventually with different methods for different sectors in the economy.

The rotation period in industry shortened both as percentage of the net sales and the total of material input until 1975.* (See *Table 4*)

As against a rotation of stocks five times a year computed according to the first method, material stocks are circulating in the industry – if measured in the proper way in my opinion – only 3.5–4 times. This is a rather considerable deviation, and thus a completely different evaluation of stocks may be given that approaches reality better. The rotation speed of stocks considerably increased between 1970 and 1975 (the circulation period shortened by 10 days), then it remained at a steady level.

*

Table 4
Rotation period of stocks in the Hungarian industry
(days)

Base of projection	1970	1971	1972	1973	1974	1975	1976	1977	1978
Net sales	78	77	78	74	73	71	73	72	73
Total of material inputs	105	99	100	98	98	95	95	95	95

*The total of material stocks and of short-lived assets is related to the total of material inputs. If the numerator of the fraction included all stocks, then the rotation speed would be less, i.e. expressed in days by 30–40 days more.

The material intensity of the Hungarian economy increased between 1970 and 1978, the quotient of intermediate consumption and the gross national product amounted to 55.8 per cent in 1970, to 58.5 per cent in 1975 and to 59.4 per cent in 1978.

Together with the significant increase in the material consumption ratio, characterizing the entire period examined, the decreasing specific stock level – increasing rotation speed – may be judged as favourable. However, the level of stocks is so high that examining the development of stocks from this aspect the results achieved may be considered only as initial and insignificant.

Stockpiling

Stockpiling means the total of products used for the increase of stocks from the production and imports of a given period (usually a year). However, changes in stocks in a certain period depend not only on the value of materials, commodities, etc. accumulated from production or imports as stocks, but also on other factors. Such are, for example, the revaluation of stocks because of price changes, requalification from fixed assets into circulating assets (or the opposite of this), losses in stocks, sorting out, etc. The difference in the value of stocks between two dates is expressed by the indicator of changes in stocks. In the analysis the development of stocks is compared to certain categories of national accounts, therefore it is measured by the indicator of stockpiling adequate to the system of accounting. This is the reason why I do not deal with the proportion of yearly changes in stocks related to the total of stock.

Stockpiling is analyzed here not by means of absolute figures (value data), but by a system of indicators and first of all by its charts that shows the major factors of the management (production and consumption) process determining stockpiling in their totality and their joint effect.

Examination of and judgement on the volume and development of Hungarian stockpiling are made decisively through international comparisons. The number of countries drawn into the examination is large: corresponding data of 19 capitalist and 4 socialist countries of different development levels and of different potentialities are compared with each other. Resulting from particularities of national accounting in socialist and capitalist countries, the production categories used as a basis of the system of indicators are varying: in socialist countries the net material product* while in capitalist ones the value added (GDP) is used. Since in Hungary indicators of both the GDP and NMP are available, this allows a comparison with both capitalist and socialist countries.

It is worth comparing Hungary's stockpiling with that of capitalist countries first, because in this relation possibilities for a more differentiated judgement are considerably

*NMP

better because of more data available. Another reason why I am doing so is that I consider the indicator of GPD better suited for comparison with stockpiling than NMP computed on the basis of material production system (MPS). Namely, GDP and stockpiling refer to the same sphere, to all material and non-material activities of the economy, while NMP only to material activities.

The indicators used for the analysis were the following:

1. the annual growth rates of GDP (or NMP) computed at constant prices (this index expresses the rate of economic growth and changes in growth rate);

2. stockpiling in percentage of the increment of GDP (or national income) as compared to the previous year (this index directly shows what part of the yearly production increment was "used up" by production, or, from another aspect: what part may be used for the increase of fixed capital formation or for financial stimulation serving the acceleration of economic growth);

3. stockpiling in the given year in percentage of the output of the same year (this is the generally used rate of increase of stocks whose economic content may be interpreted similarly to the previous indicator, but it is not a comparison with the increment);

4. import (–) or export (+) surplus in percentage of production (this index reflects the equilibrium situation of the economy both in the long run and from year to year through the extent of foreign resources drawn in or that of surplus production exceeding domestic uses);

5. imports of a given year in percentage of the production of the same year (this shows the import intensity and the sensitivity to world market effects of the economy);

6. fixed capital formation in a given year in percentage of the production of the same year (the rate of investment and its development reflect the growth intentions of the economy).

The data used for the computation of indicators 2, 3, 4, 5 and 6 (stockpiling, GDP, NMP, etc.) are data exclusively at current prices.*

The countries compared may be grouped according to their development level in the following way:

– the per capita GNP exceeds 8.000 dollars in Switzerland, Denmark, Sweden, the FRG, Belgium, Norway, the United States, the Netherlands, France, Canada, Japan;
– it is about 6.000–7.000 dollars in Austria, Finland and Great Britain;
– it is around 4.000 dollars in Italy, Spain, Greece;
– it is under 2.000 dollars in Portugal and Turkey.

The order of socialist countries is the following: Czechoslovakia, Poland, USSR and Hungary. They are near to the level of Spain and Greece according to per capita GNP, while Yugoslavia is somewhat lagging behind. It is especially important to emphasize here that only orders of magnitude of development level are presented, that is why the forming of groups is so rough-and-ready.

*In case of capitalist countries on the basis of data of [3] while in case of socialist countries on the basis of data of [4].

I am grouping the countries examined on the basis of a further general characteristic – important from the viewpoint of the topic –, namely, it is the import intensity (indicator 5) of their production (GDP and NMP, respectively):

capitalist countries

1. imports amount to about 10 per cent of production (GDP); here belong the United States, Japan and Turkey;

2. imports amount to 20–25 per cent of GDP; here belong the Federal Republic of Germany, France, Canada, Italy, Spain, Greece;

3. imports amount to about 30 per cent of GDP; here belong Switzerland, Denmark, Sweden, Austria, Finland, Great Britain, Portugal;

4. imports amount to about 40 per cent of GDP; here belong Belgium, Norway, the Netherlands;

socialist countries

1. imports amount to 25–30 per cent of production (NMP) (until 1973), then to 35–40 per cent in Czechoslovakia; the share of imports was around 40 per cent in Hungary until 1973 and moved around 55 per cent between 1974 and 1976; in Yugoslavia this share of 25–30 per cent hardly changed apart from a 6 per cent increase in 1974;

2. relevant data are not available for Poland and the USSR.

Hungary's import intensity was similar to that of group 3 of capitalist countries until 1973 and to that of group 4 since 1974. In 1974 the index increased also in capitalist countries, but this increase was considerably less than the one experienced in Hungary – the half of it on the average.

Hungarian stockpiling as reflected by data of capitalist countries

Examinations are made in two steps in the case of socialist countries. Stockpiling is judged on the basis of the quotient of stockpiling and the increment of production (indicator 2) first. Following this, the four indicators plotted – economic growth (1), balance of trade (4), rate of investment (6), stockpiling (3) – will be examined, first of all the existence, direction and closeness of their relationships. (See *Figure 1*)

The Hungarian values of the six indicators are shown in *Table 5.*

Out of the 19 capitalist countries there are altogether 5 where similarly to Hungary we can speak only about positive accumulation in stocks during the entire period. (Indicator 2 is positive in each year, and that does not depend here on the sign of change in GDP, this is, namely, positive in each case.) These countries are: Japan, Finland, Greece, Spain and Turkey. As to Japan's stockpiling it should be known, however, that it amounted on the average only to 11 per cent of the increment of GDP between 1970 and 1977. In each of the remaining 14 capitalist countries a decrease in stocks could be observed at least once.

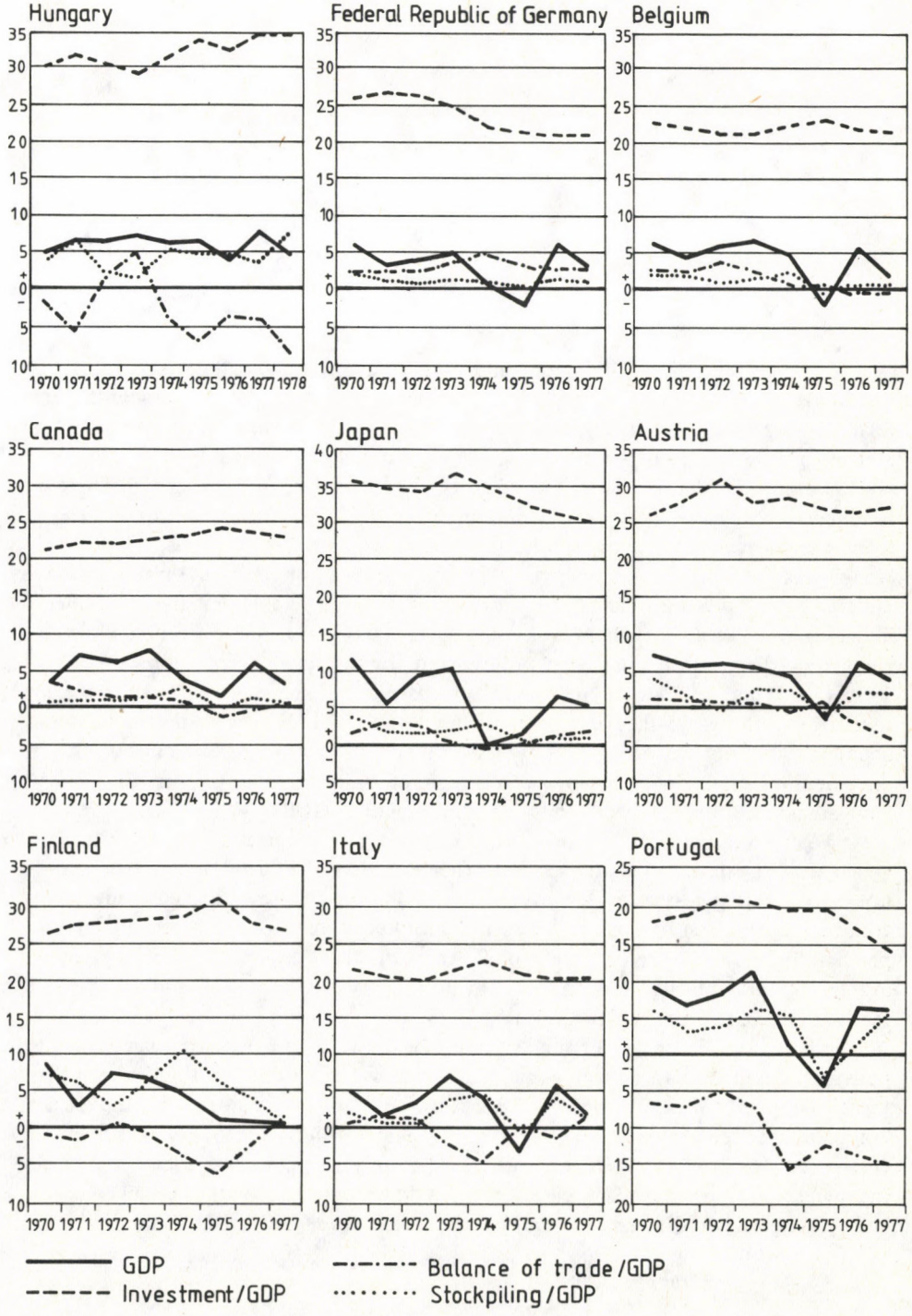

Fig. 1. Stockpiling and its factors in some countries (computed on the basis of the GDP)

Table 5
Development of the individual indicators in Hungary

Indicator	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
1	4.7	6.2	6.1	6.9	5.9	6.2	3.6	7.5	4.4	2.7
2	56.8	80.6	24.2	10.7	106.9	64.4	49.0	34.6	94.5	23.9
3	3.4	6.3	1.9	0.9	4.8	4.4	4.3	3.2	7.2	1.8
4	−2.3	−6.2	1.2	4.6	−4.4	−7.4	−4.3	−4.5	−9.1	−3.4
5	32.4	36.3	32.9	33.6	46.0	48.6	42.5	45.5	47.5	44.5
6	30.1	31.3	29.9	28.7	31.0	33.4	31.9	34.1	34.1	32.4

When examining the minimum and maximum of the indicator it should be taken into consideration that economies of the capitalist countries were characterized by a relatively fast growth between 1970 and 1973, then, following the explosion of raw material prices by a trough in 1974 and 1975 and mostly by stagnation. The minimum of stockpiling fell in the overwhelming majority of capitalist countries to 1975. There were some countries where the years of minimum were 1972 and 1977, respectively, deviating from the above. All countries except Japan only accumulating stocks belong here. Hungary is the only country where 1973, the last year prior to the explosion of raw material prices, was the year of minimum stock. If I add to this that the year when the indicator reached its maximum was 1974 in Hungary, then a significant deficiency of Hungarian stock control has been pointed out. In the majority of capitalist countries 1970, 1971 and 1973 were the years of maximum. There are five countries where, similarly to Hungary, the year of maximum was 1974. However, in these capitalist countries – except for one – the 1974 stockpiling did not reach even one fourth of the increment of GDP, while it approached half of it in one country. In the same year Hungarian stockpiling exceeded the annual increment of GDP by 7 per cent.

When examining the quotient of stockpiling to the increment of GDP it may be stated that in capitalist countries – with the exception of Finland and Greece – it does not exceed 20 per cent on the average and is higher than 30 per cent only in three countries in the year of maximum. The average of eight years is 33 per cent in Greece, 40 per cent in Finland, while the corresponding maximum values are 50 and 68 per cent. The average of this indicator was 58 per cent in Hungary between 1970 and 1978, while it reached 107 and 95 per cent in 1974 and 1978.

There are two important conclusions to be drawn after having compared Hungarian data with the main tendencies of capitalist countries (disregarding for the time the characteristic features of Western economies). First, the development of stockpiling in Hungary is completely different from that of capitalist countries; however, owing to her intensive foreign economic relations Hungary can not (or only with great sacrifices) make herself independent of changes taking place on the world market. Secondly, it may be observed that stockpiling in Hungary is high in itself and even very high in comparison with

capitalist countries. In certain years the increment of GDP is the same as that of stocks what means that fixed capital formation and/or consumption can be increased only by drawing in foreign resources (the average of this indicator of Hungarian stockpiling computed for the last nine years is nearly the same as the worst single maximum of capitalist countries).

Supposed correlation of stockpiling with production, fixed capital formation and the balance of trade has been examined separately by means of charts. It is important to emphasize that when comparing individual indicators with each other the magnitude of change has only rarely been examined, but its direction in each case. Accordingly, the close correlation between two factors means that the direction of changes in the individual factors was identical in most years of the period analyzed.

1. When examining the development of the quotient of stockpiling to production, 9 capitalist countries may be found where the direction of changes in the two indicators was diverging even in three or four years. It is interesting that all the five economies (the Japanese, Finnish, Greek, Spanish and Turkish) continuously increasing their stocks during the entire period belong to this group of countries. Only five capitalist countries may be found where the direction of changes in the indicators was diverging in two subsequent years. Four of the above mentioned five countries belong here. The direction of changes in production and stockpiling diverged from each other in three successive years only in Finland and Norway. Consequently it may be stated that in capitalist countries the development of stocks is decisively influenced by that of production. In the short run direction of changes in stocks and in production may diverge, but no diverging direction could be found in more than three successive years in any of the 19 countries.

In Hungary the direction of changes in stockpiling was identical with that of production between 1970 and 1978 only in 1971 and 1976.

2. Fixed capital formation and stockpiling have the same source in the economy, namely, production and import. Disregarding now imports, in a growing economy with an unchanged rate of accumulation and within this with unchanged specific material inputs – the increase of fixed capital formation and stockpiling seems to be a function of the increase of production. Investment requires certain stocks, while, the increase of investment (the enlargement of the stock of assets) brings about stockpiling (increase of stocks). In such a supposed case the direction of changes in production, investment and stockpiling is identical. (This assumption may be considered real at least for a short run in a subsistence economy.) Since the close connection between production and stocks has already been shown in the foregoing, now I wish to prove a presumably similar relationship between fixed capital formation and stockpiling. Charts of fixed capital formation and stockpiling show nearly identical form in 9 capitalist countries (thus, for example, in the case of the United States, Japan, Denmark, Italy and Spain). In some countries stock curves move basically around those of fixed capital formation with only some considerably greater fluctuations of occasionally divergent direction from the latter (for example, in the Federal Republic of Germany, the Netherlands or Sweden). There are merely 3 countries (Norway, Turkey, Portugal) where the development of stockpiling deviated from that

of the rate of fixed capital formation in major part of the period examined and only one (Greece) where the two indicators were differing during the entire period. Consequently, the direction of changes in stocks is usually the same as that of investment in the capitalist countries. However, this correlation is looser than that between production and stocks, it is rather a tendency.

In Hungary the two curves had almost the same form until 1974. Since then the relationship has shown a tendency character, that is the development of stockpiling has been connected with changes in the rate of investment.

3. I try to prove the existing relationship between the balance of foreign trade and stockpiling indirectly by means of charts and also logically. There is an unambiguous relationship of universal validity in almost each capitalist country: if fixed capital formation increases, the balance of trade is deteriorating (and *vice versa*). *This relationship is very palpably shown by the curves.*

An increase in fixed capital formation to an extent exceeding the increase of production usually means a greater share of production for domestic consumption than previously on the one hand and a decreasing export share on the other.

If we take into consideration also the fact that an increase of fixed assets mostly induces that of imports – because of the necessary import of technology in non-subsistence economies and its effects on stocks –, then the inverse and close correlation between the two factors in question and, especially in smaller economies, the closeness of this relationship are already quite unambiguous.

After having stated the correlation between stockpiling and the development of fixed capital formation I may say that in the capitalist countries examined there is a similarly close correlation between stockpiling and the balance of trade, but it is of an opposite direction. An increase of stocks is usually accompanied by deterioration of the balance of trade.

In Hungary there is a very close correlation between stockpiling and the balance of trade – considering also the extent of changes in the individual factors –, the direction of changes of both curves was identical only in 1975 and 1977.

Summarizing the above the following statements may be made.

It is generally characteristic of capitalist countries that the yearly stockpiling depends first of all on the dynamics of production. Changes in stocks are influenced also by changes in the rate of investment and by the balance of trade. In Hungary the development of stockpiling may be connected with changes in the balance of trade and the rate of investment. Changes of almost completely opposite direction in the dynamics of production and stocks between 1970 and 1978 are serious negative phenomena of the economy, apart from any other factors. Stockpiling not or not at the same rate following the increasing production – with given stock requirements of production accepted for the short run – contradicts the general regularities of the economy and necessarily brings about increasing stockpiling in the next year, independently of the development of all other factors (production, balance of trade, etc.). This is supported also by *Figure 2.*

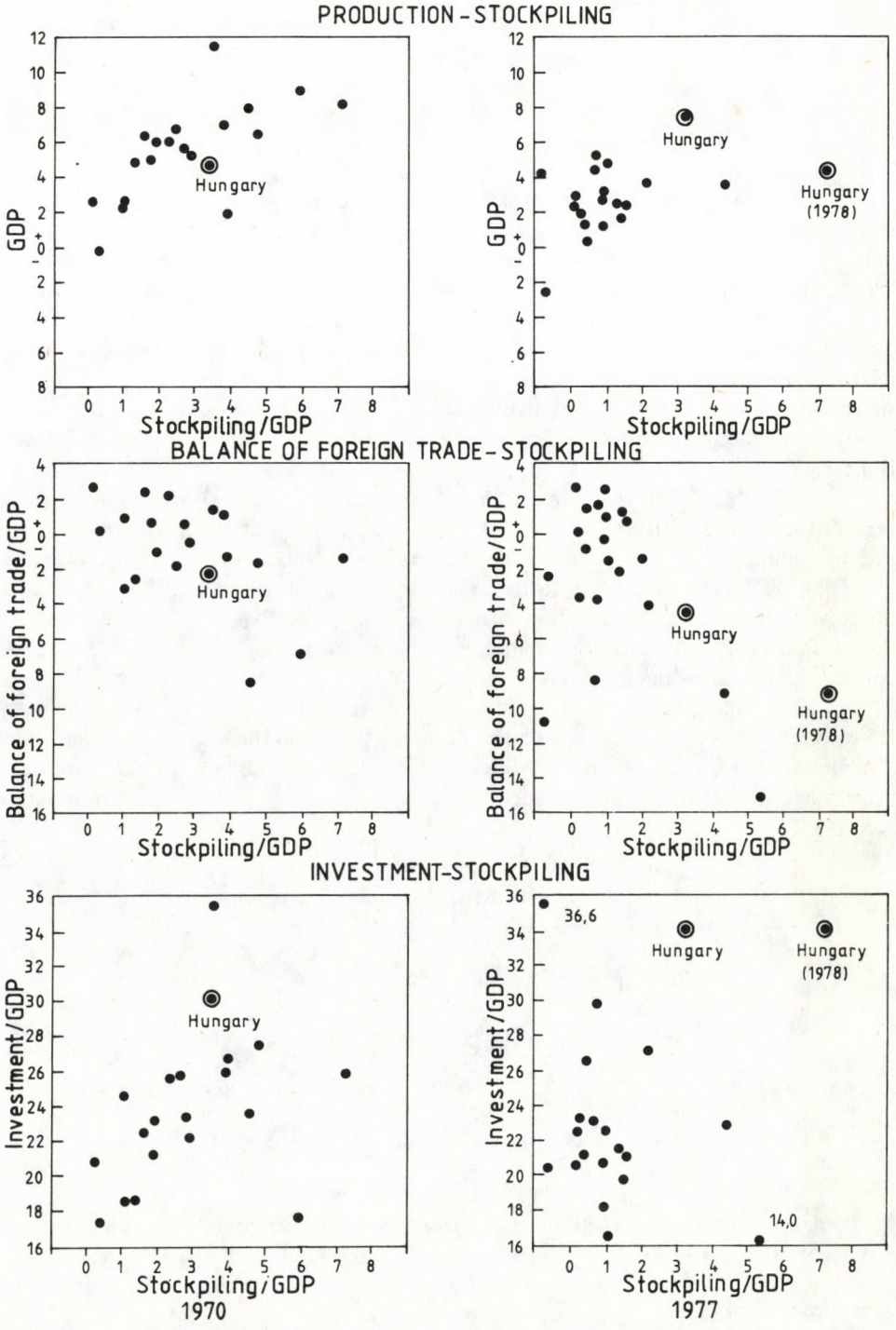

Fig. 2. Relationship of stockpiling to production, foreign trade and investment

Hungarian stockpiling as compared to that of other socialist countries

It is characteristic of the four socialist countries examined between 1970 and 1976* that – similarly to Hungary – their stocks increased, the indicator of stockpiling (indicator no. 2) is positive in each year.

The maximum and minimum of the quotient of stockpiling to the increment of NMP show a dispersion in the socialist countries over the entire period. It is worth mentioning that 1974 was the year of minimum only in Czechoslovakia, while in Yugoslavia stocks reached their maximum in the same year.

The average value of the indicator was the highest in the Soviet Union (233 per cent) during the seven years examined, very high in Czechoslovakia (193 per cent) and relatively low in Poland (73 per cent). Yugoslav data are not comparable from this viewpoint, namely, the indicator of production is rather of gross than of net character according to the source of data. The average value of the indicator was 124 per cent in Hungary.

On the basis of all this – regarding everything what has been said concerning the capitalist countries – it may be stated that stockpiling is extraordinarily high in the socialist countries, it is less than the increment of NMP in the average of seven years only in Poland. According to the indicator Hungary's stockpiling is half of that of the Soviet Union, considerably less than that of Czechoslovakia and much higher than that of Poland. For the socialist countries no characteristic stock cycles could be found on the basis of the maximum and minimum of the indicator.

1. Examining the curves of production and stockpiling an unambiguous and very close correlation may be observed between the two factors in the four socialist countries. The direction of the development of stocks was deviating from that of production in two years solely in Poland. In the USSR and Czechoslovakia the two curves almost perfectly

Table 6

Development of individual indicators in Hungary

Indicator	1970	1971	1972	1973	1974	1975	1976
1	4.9	5.9	6.2	7.0	5.9	6.1	3.0
2	112.7	182.7	66.0	27.4	282.7	103.0	93.5
3	7.4	13.2	5.1	2.6	10.9	6.6	8.3
4	−2.8	−7.6	1.5	5.5	−5.4	−9.1	−5.2
5	39.2	44.1	40.0	40.7	56.0	59.4	51.9
6	19.8	19.1	20.1	20.3	19.0	25.7	21.5

*Because of the lack of data the period analyzed was one year shorter in case of the four socialist countries than in that of capitalist countries.

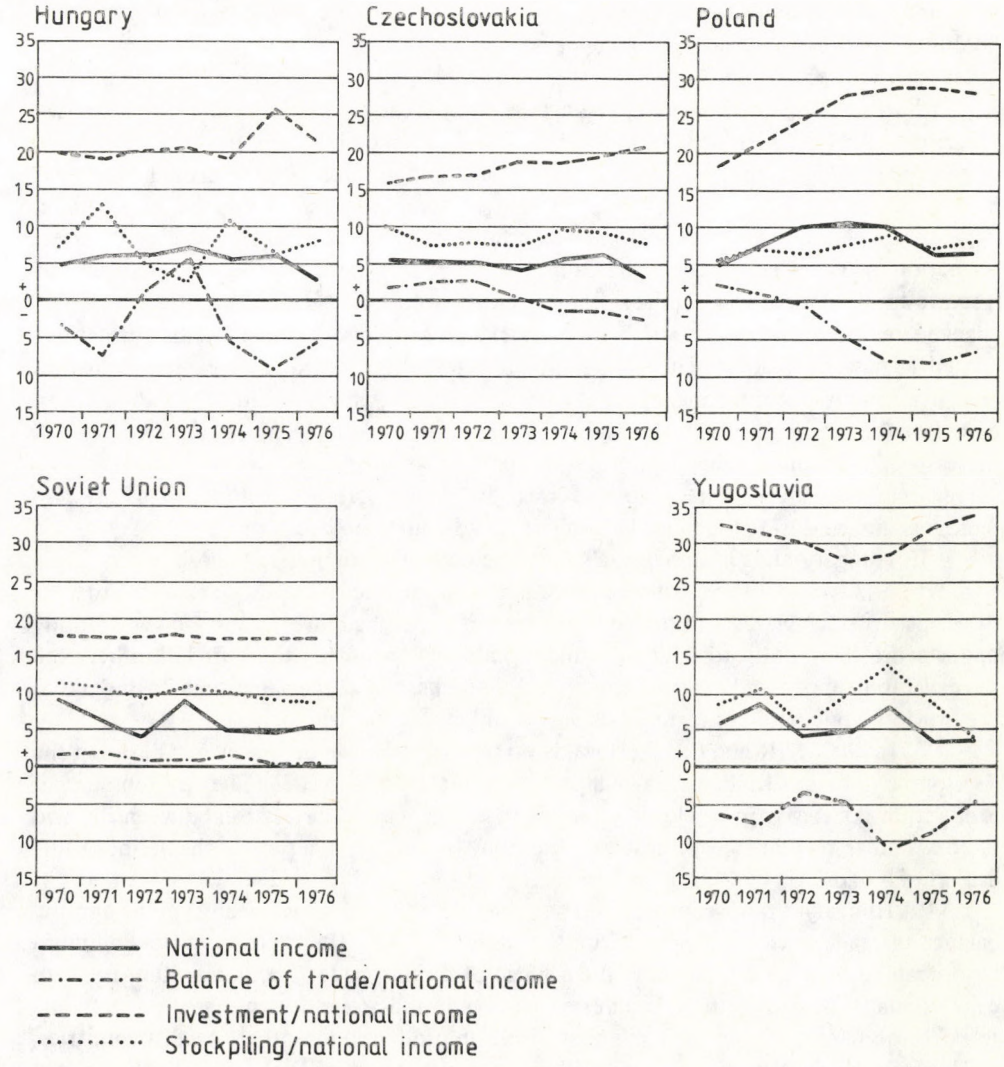

Fig. 3. Stockpiling and its factors in some socialist countries (computed on the basis of the NMP)

fit to each other – taking also the extent of changes into consideration. In Hungary changes in NMP and stocks were of opposite direction over the entire period, except 1971.

2. In the socialist countries the rate of fixed capital formation and stockpiling changed in an opposite direction in more than two thirds of the period, except for Poland. In Hungary the two indicators showed an opposite development in each year. This does not correspond to my previous statement. An explanation may be found for this in the different

interpretation of the notion of fixed capital formation and stockpiling, as used in national accounts, and in socialist economic balance computations – and also in the present computations.

Charting the correlation of Hungarian stockpiling to GDP and NMP, the two indicators show an identical development. The difference between the two conceptual systems is caused by the fact that the accumulation in unfinished fixed capital formation belongs to fixed capital formation in the SNA system and to stocks in the MPS system.

In the period examined stockpiling and the accumulation of unfinished fixed capital formation projects changed in the same direction in Hungary in each year (even the magnitude of changes was similar). Consequently, stockpiling related to GDP necessarily changed in the same way as stockpiling (stocks and unfinished fixed capital formation) related to national income. The direction of changes in unfinished fixed capital formation and investments put into operation, is usually deviating.* Since within the MPS concept of national income only investments put into operation mean fixed capital formation the increase of stockpiling (that is, unfinished fixed capital formation and stocks) implies a decrease of the rate of fixed capital formation. The deviating development of the two factors analyzed during the period examined may be justified by this fact.

In Hungary and presumably also in other socialist countries, there is a very loose correlation between the rate of fixed capital formation and stockpiling according to MPS – because of the high level of the accumulation of unfinished investment. However, in my opinion the SNA indicator-system is more suitable for judging the correlation between the development of fixed capital formation and stocks, and at the same time, this weakens the previous statement concerning socialist countries.

3. In the USSR and Czechoslovakia no interrelation can be discovered between the development of stockpiling and changes in the balance of trade. (The development of production is decisive in stockpiling.) In the case of Poland a correlation between the two factors similar to that in capitalist countries may be verified in a part of the period, while in that of Yugoslavia over the entire period.

In Hungary a rather close correlation may be observed between stockpiling and the balance of trade (such as computed on the basis of GDP). The increase in stockpiling is accompanied by a deterioration in the balance of foreign trade. Comparing Hungary with other socialist countries there is an essential conclusion to be drawn, namely that while the development of stocks depends first of all on production in other socialist countries, in Hungary changes in stocks and stockpiling may be linked first of all to the import (or export) surplus.

What can be said about inventory control in Hungary, the volume and development of stocks after all these? It may be stated that stocks are very high, whether measured to the international level or to Hungary's economic potentialities. An assumed reason for this is the given organizational and institutional system of the economy as well

*An increase in unfinished investment usually means a decrease (in the number and value) of fixed capital put into operation.

as the product pattern. Therefore, without changing the reasons an undisturbed production process may be ensured both in the short and the medium run only with large stocks.

Stockpiling in Hungary between 1970 and 1978 was connected decisively with changes in the balance of trade and not with fluctuations of production. The same relationship does not hold for any of the 23 capitalist and socialist, developed and less developed countries nor for economies with low and high import-intensity drawn into the study.

In Hungary the year-to-year changes in production and stockpiling of opposite direction are levelling off in the longer run, but this specific rhythm-disturbance of the economy is a source of considerable losses. For example, the reduction of stocks in 1979 furthered by all possible means of regulation following the extraordinarily high stockpiling, foreign trade deficits and imports of 1978 caused occasional disturbances in production and might bring about an increase of stocks again.

It is important to emphasize these concomitant phenomena of stock reduction in the knowledge of the effective stockpiling of 1979 and the expected one of 1980. The extraordinarily low stockpiling of 1979 – a similar one was last time experienced in 1972–1973 – could still result from the 1978 stockpiling, but this may be much less said about 1980. If only by the nature of stocks, reservation for several years ahead is impossible.

Stockpiling kept at a low level may be achieved even for two-three years only through using strict restriction and direct means under present conditions. However, this seems to be a rather risky means of improving macroeconomic equilibrium.

Looking for a delayed effect in this field must be criticized even in principle and its expediency may be refuted also in practice through international examples. It is true, however, that out of the two elements of accumulation – fixed capital formation and stocks – the latter one may be much more easily influenced and regulated in the short run. However, rapid results to be achieved in this way may only be temporary.

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ЗАПАСЫ И ИХ НАКОПЛЕНИЕ В ВЕНГРИИ В МЕЖДУНАРОДНОМ СОПОСТАВЛЕНИИ

А. ДЬЮЛАВАРИ

Автор рассматривает динамику запасов и накопления запасов в 1970—1978 годах.

Сопоставляя венгерские фонды запасов с таковыми в федеральной Республике Германии, Англии, Чехословакии и Советском Союзе, автор отмечает, что их уровень очень высокий в первую очередь по сравнению с капиталистическими государствами.

Согласно его мнению, применяемый в венгерской практике удельный показатель запасов (показатель быстроты оборота) в своей нынешней форме не обладает должной точностью. Представляется целесообразным проводить более тонкие, детальные расчеты по отдельным сферам воспроизводства или народнохозяйственным отраслям, в которых следует элиминировать эффекты изменений в системе экономического регулирования.

Как для социалистических, так и для капиталистических стран в рассматриваемом периоде было характерно идентичное направление динамики накопления запасов и производства, в то время как в Венгрии эти два фактора складывались по-разному. Здесь накопление запасов стоит в тесной связи с формированием внешнеторгового баланса.

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L. KÓNYA

CONDITIONS OF SETTING UP SIMPLE FORMS OF COOPERATIVES IN THE HUNGARIAN INDUSTRY

The Hungarian industry is highly concentrated and overcentralized, the ratio of small and medium-sized enterprises and cooperatives is low. A part of small and medium enterprises were amalgamated into large enterprises and cooperatives were forced to merge; as a result market relations became narrower and the adaptivity of the economy diminished. Because of it there is a pressing necessity to create new small ventures. This can be brought about in the cooperative sector by decentralizing some large cooperatives with rather heterogeneous production lines (by making some units independent), and by the formation of new small cooperatives.

For the small organizations easily manageable simple accounting and taxation systems have to be devised since they cannot meet the requirements of existing complicated systems. Interestedness and the feeling of ownership can be expediently enhanced also if the individual savings of the members are drawn to greater extent into the financing of cooperative development objectives – against adequate dividends.

Recent Hungarian economic literature* has often discussed the enterprise size pattern of the Hungarian industry, its historical development, the factors it is exposed to, the process of centralization and concentration, its advantages and disadvantages, and the role of small and medium-sized enterprises. Thanks to them, in possession of the correct diagnosis, we are in a position to engage ourselves chiefly in the therapy.**

Factors affecting the enterprise size pattern

The present size pattern of the Hungarian industrial enterprises evolved through a powerful process of centralization asserting itself over more than 30 years and accelerated by reorganization compaigns. Often, centralization not coupled with concentration and thus the economic result fell short of expectations. Under the influence of centralization the number of state-owned industrial enterprises decreased by 48 percent and that of the industrial cooperatives by 44 percent between 1960 and 1977. A slower rate of concentration is indicated by the merely 26 percent increase of the average shaft of industrial establishments between 1955 and 1970.

*The most important studies on which I relied in writing this paper are listed in the Bibliography.

**In the apparatus of the National Council of Industrial Cooperatives (OKISZ) a team of experts led by the author elaborated models for simpler forms of cooperatives which have provided the basis for this paper. (In the meantime, the government has passed decrees which mostly implement the ideas discussed in this paper. – Ed. note).

As a rule, CMEA countries have a more powerfully centralized industry than Western ones, whether they are the most advanced ones or at a similar stage of development. This is typical even when neither technological standards nor the organization of production justify it. The low ratio of small and medium-sized enterprises is especially striking. Moreover, the centralization of the Hungarian industry is higher than in other CMEA countries except for Czechoslovakia and Romania. It is revealing that while in the manufacturing industry of Western countries 14–15 per cent of the employees work at enterprises with a staff below 50, in Hungary this ratio is a paltry 0.1 per cent.

In the advanced Western countries the process of centralization and concentration has shown a deceleration and has even stopped in recent years and a multitude of small and medium enterprises have come into being. This is attributable in part to growing demand for individual and small-series products as well as for repair and maintenance, and in part to the particular importance of adaptivity (flexibility, responsivity to market) in the long stage of recession in the world economy. These processes are also affected by the fact that up-to-date production technologies are already available also for small and medium-sized enterprises.

The stepped-up centralization of the Hungarian industry (amalgamation of small enterprises, often unreasonable fusions of cooperatives, etc.) triggered unfavourable tendencies. It occasionally eased the problems of given enterprises and cooperatives with respect to labour, capacity, background industries, etc. but it threw back the adaptivity of the economy as a whole. Along with the decreasing number of small and medium-sized enterprises market relations shrunk and tensions increased in the field of public services and supply, as well as in cooperation required for the specialization and more efficient management of big enterprises.

According to international experiences it is the impact of the system of economic control, that is the decisive one among the numerous factors affecting the enterprise size pattern, beside the historical precedents of industrial development. Important but fading roles are played by technical-technological features as well as by production patterns, while the influence of the size of the country is negligible.

Although the harmful results of overcentralization were recognized, under the Hungarian conditions a host of factors keep the enterprises and cooperatives driving to grow, cost what it may. Such factors are the system of economic regulators tailored to suit big enterprises; the overheads of administration which the small and medium enterprises or cooperatives cannot bear, the prestige and financial incentives of managers, the scarce availability of resources (subsidies, credits, raw materials, imported machines, etc.) depending on enterprise size. In this latter respect there has been some recent improvement but, as far as the others are concerned, appreciable results cannot be hoped for but after some longer period of time. The old conceptions about the superiority of large-scale production, irrespectively of space and time, are too deeply rooted in public thinking.

The role of small enterprises and cooperatives

According to Hungarian and international experience the big enterprises enjoy absolute superiority over the small and medium-sized ones in the mass production of intricate products manufactured through many operations, requiring long preparation and manysided professional knowledge, especially when the product pattern is stable over a longer period of time and the exchange of assortment is relatively slow. Today, however, the abrupt and often unpredictable changes in demand are typical of both the world market and the domestic markets of countries with advanced economy. In such circumstances flexible adjustment to market requirements is an important factor of economic success, especially as regards the products of the manufacturing industry. In Hungary and in countries at a similar or higher development level, public demand for individual products or those manufactured in small or medium batches grows along with the rising standard of living. Demand for individual or small-series new products such as means of production, special tools, parts, components increases also in the sphere of production along with the acceleration of innovation. It is an essential condition of the efficient and competitive functioning of big enterprises to have enough small and medium-sized enterprises and cooperatives in the background which, in the capacity of dependable partners in cooperation, should be able to take over activities more suitable to small and medium enterprise conditions. The dynamically growing demand for services in production and consumption could also be rationally met mostly by small and medium enterprises which are normally competitive in the said fields, also with respect to the cost and price level owing to their lower capital and overhead requirements. By appropriate simplification and rationalization of control and administration their unit costs depending on the proportion of the non-productive staff could be cut further down.

The problems of small organizations are simpler to tackle – usually on the spot, with local means, without budgetary subventions – and with less "social overhead". As these organizations are not of high capital intensity, their development and updating can be carried out with smaller amounts of investment that would be returned more quickly, financed mainly from their own resources and credits. The characteristic features of future small organizations including small-cooperatives* will be, precisely as the condition and outcome of their very competitivity, modern techniques and technology and a fair amount of innovativity and not technological backwardness and low wages.

All that unequivocally justify the growing role of the small and medium enterprises and cooperatives. Centralization must be subordinated to the criterion of efficiency and must not be treated as the only way towards enhanced economic efficiency and competitivity. Unjustified fusion and mergers of small and medium enterprises and cooperatives must be avoided. Furthermore, it would be reasonable to create such economic and legal conditions as would extend the scale of cooperative forms and stimulate small and medium-size ventures. The increase of the number of small and medium enterprises

*The hyphen indicates that we have a separate form of cooperatives – Translator's note.

naturally does not imply an underestimation of the advantages of large-scale production and of big enterprise sizes; as stressed above, its objective should be to balance and make more proportional the distorted size pattern of the Hungarian industrial enterprises. As the means towards this end, economic conditions have to be created under which the status of the enterprises is not determined by their size but by the profitability and economic efficiency of the business they pursue.

The objective and impact of changes in the organizational system

We must set out from the fact that the organization is not an end in itself but it is the means towards attaining the actual economic policy objective. The need for and the directions of changing the system of organization are determined by the current and prospective tasks: to improve market sensitivity and adaptivity, to foster the competition for buyers, to accentuate enterprising traits, to improve export capacity, to substitute a part of imports from the world market by domestic products, to reduce the range of items in short supply, to develop cooperation activities and background industries. The postulate of enhanced efficiency is common to all these partial objectives.

One of the major conditions of mobilizing the reserves hidden in enhanced efficiency is the autonomy of enterprises and cooperatives developing on the soil of a healthy organizational structure. Experiences show that the internal accounting system of overcentralized business units disguises the shortcomings of activities and business management in the different subdivisions. It is a frequent case that some disfunctioning division of a multiprofile cooperative can survive for years at the expense of the other divisions on the total gains of the cooperative.

It is one of the main reasons hindering the elimination of overcentralization as well as the creation and survival of small and medium-size enterprises that small organizations are not able to satisfy the – extremely intricate – economic regulations, rules of administration, specifications of recording and reporting all designed to meet big enterprise sizes and conditions, and that they cannot afford the overhead costs of a big non-productive staff the above would require.

The simplest possible system of control, recording and reporting should be devised which should work well with smaller organizations while observing sensible normative requirements; more intensive and direct interest relations should be realized through devising a clear-cut and stable system of incentives. Today the economic regulators force the business units in Hungary to use up the reserves for the promotion of their efficiency at most gradually, in portions distributed over several years, and to refrain from any measure that would drastically promote their efficiency. From this aspect not only the regulators concerning small organizations but the entire incentive system needs improvement. However, here too the small organizations are in a special position inasmuch as, unlike bigger enterprises having several plants, they are not in the position to "earn" at one plant the higher wage paid to workers of another plant for their better and more

production. Translating this into the language of regulation: a more powerful incentive system would require us to put heavier burdens on those below the average and to simultaneously relieve the burdens on above-average performances. This way an income distribution more proportionate to actual performances would be brought about and that would be stimulating for the whole economy. Another instrument of improving incentives and, at the same time, of promoting the feeling of cooperative ownership would be an increased feeding back of the individual savings of members into the sphere of production, a necessity which is becoming more and more obvious in our society anyway.

The recent and the foreseeable changes in the labour situation create more advantageous conditions for setting up new small cooperatives than was the case earlier. The urge to increase staff that generelly prevailed a couple of years ago is no longer typical and is going to be still less powerful in the years to come when it is intended to strongly promote productivity with a curbed growth rate of production. Therefore, the labour requirements of the newly set-up small cooperatives cannot cause any special problem; on the contrary, they might well contribute to the assertion of *full and efficient employment* in the society as a whole.

Beside full-time employment it is reasonable to create conditions for utilizing partial worktimes of the most different strata, as well as those for work that may be done in leisure time. Simpler cooperatives having a higher degree of autonomy than at present could offer a particularly suitable framework for that with their more flexible working time and working order. However, for this purpose the financial incentive for doing part-time work has to be increased. For example it would be reasonable to take the salary earned with part-time activity into account, in one way or another, in calculating the base of the later pension, or at least to make it possible for those concerned to pay voluntary contribution to the pension fund. Furthermore, it should be made possible for workers doing part-time work for such simpler cooperatives beside their full-time job, to join the cooperative as members.

Last but not least, the simpler forms of cooperatives recommend themselves because of the role they can play in the accomplishment of the social objective of channelling the biggest possible part of the not legalized, so-called second economy activities into legal frameworks. In this respect it is still to be clarified under what terms these cooperatives can become competitive as against "working on own account"* which is till now out of control and regulation and is not even liable to quality guarantees and taxation. It is nevertheless presumable that being an employee (cooperative member) with a legitimate pay earned with extra work as well as this way of increasing the amount of pension can become strongly attractive.

*During worktime and possibly with the materials and tools of the employer. (Tr. note)

Simpler cooperative models

Simpler cooperatives as special ventures may be set up for many kinds of actual objective. For example the following may be noted as such objectives: manufacturing of consumer goods that are recorded among the shortage items in the domestic trade, or are to serve the purpose of local supply, and are suitable for small-series production; import substitutive production; so-called background industrial activity for big enterprises (manufacturing of parts and components in small batches); outwork of the commission work type for bigger enterprises and cooperatives; implementation of inventions and innovations, and producing and manufacturing activity complementary to theoretical research work; industrial, building services, passenger transport, commercial activity, caring for the sick and old in their homes, child nursing, translation, interpretation, etc. for the purpose of public supply. The setting-up of small-cooperatives could be supported financially also by big enterprises or bigger cooperatives that hope to rely on them in solving their own problems of background industry.

The recommendation prepared at OKISZ devises, besides small-cooperatives, to set up special industrial cooperative groups as well as to improve the lump-sum system as versions of further development. The simpler cooperatives could come into being as new organizations or through decentralization of existing industrial cooperatives. Decentralization may take place by division or separation as well as by the transformation of certain divisions into contractual (lump-sum) units.

An adequate network of background institutions in charge of promoting the activities of small organizations is indispensable for their setting up and viability. For example the tasks related to their production for export could be discharged by different economic associations: provision with the necessary information, representation of interests at foreign trading companies, cooperation in marketing research and technological development and perhaps coordination between cooperatives and other small plants and other business organizations.

It is reasonable to purchase raw and other materials required for the economic activity of simpler cooperatives in an organized way since the companies trading in means of production and the wholesale trading companies are not interested in satisfying orders of small accounts. This could be carried out by linking these cooperatives to already operating industrial purchasing cooperative associations or to business societies. Where such ones do not exist their setting up should be encouraged. Furthermore, it would be worth of attention to devise different cooperative forms of purchase and sale. Finally, it could be imagined to provide for the small cooperatives background institutions for their book-keeping and consultation.

In most cases the simpler cooperatives should be set up by initiative from below and not by directive from above. From this follows their flexibility also in the sense that when public demand for their activities has ceased they take up new function or they, too, cease to exist.

The notion of small-cooperative

The small-cooperative is not simply smaller in size but differs from the existing cooperatives also with respect to its business management and autonomy.

The industrial and building cooperatives are currently ranked according to their staff as well as the value of output, value of dwellings built, or the net price receipts accruing for repair and service activities. The commission work type of activity is not shown adequately in the indicator of the value of output and the different indicators themselves as well as the point values assigned are also contestable.

Our examinations so far suggest that in ranking into the small-cooperative category staff numbers must be attributed a prominent role among the said indicators for this is a determining factor from the aspects of both cooperative autonomy and socialist enterprise business management and its controllability as well as the methods of management and organization that can be applied.

According to the current regulation in Hungary the minimum number of members should be 15 which we believe to be a reasonably set ceiling on staff, also bearing in mind the simplified mechanism of autonomy and control recommended for the small-cooperatives as well as the increased financial responsibility of members. A smaller unit would not be suitable for socialist enterprise business, nor for the functioning of the most primitive forms of cooperative autonomy. Fewer members could form a partnership under civil law instead of a cooperative.

Considering the simplified rules and the presumable requirements the number of members of small-cooperatives could not be more than 100. However, this should be interpreted so as to let the existing cooperatives with fewer members decide whether they intend to continue to operate within the framework of the present regulations or they prefer the rules that apply to small-cooperatives.

As a rule, the small-cooperatives would be formed for an indefinite period of time. They should operate as long as their existence is justified by the economical satisfaction of market demands. However, there could be imagined a type of small-cooperative formed for a definite period of time or for the performance of a definite task (e.g. for implementation of an invention or innovation or for manufacturing a product of given kind and quantity) and to be dissolved when the fixed period of time has terminated or the task undertaken has been accomplished.

The small-cooperative would be an independent legal entity. Its articles would be in agreement with the general statutory provisions on industrial cooperatives laid down in the act on cooperatives. At the same time, its system of autonomy as well as the economic control of its business would be much simpler. Without making a special category within the small-cooperatives for the really small ones with not more than 30 members, it is reasonable to investigate into their system of organization and the ways of making some elements of their economic regulation even simpler.

Who may be members of a small-cooperative?

A small-cooperative may become established by the association of citizens or through withdrawal or separation from already functioning cooperatives. According to our recommendations the small-cooperative may be formed by full-time members (who, even all of them, may be outworkers); by workers in employment or by members of cooperatives whose partial work time is utilized by the small-cooperative; with the cooperation of undergraduates in higher education; by retired persons (exempting them, if necessary, from the restrictions put on the terms of their employment); and, finally – by lifting the present prohibition – by women benefiting from the child-care leave; or by any combination of the aforesaid.

The need for expansion of labour resources speaks for the promotion of the outworking system. We believe it could be left to the cooperative's judgement what kind of and what amount of work it should assign to outworkers.

The risk-taking and financial liability of members for the business of their cooperative is far greater than what is borne by employees. It will be therefore proper if the small-cooperative engages employees only for such tasks as it cannot assign to its members. The employee may be engaged full-time, but part-time employment may be also sufficient.

According to the act on cooperatives a definite part of the membership may quit the cooperative for the purpose of forming a new cooperative. Although the general assembly has the right to refuse in principle only when the separation runs counter to national economic interest or would inflict insurmountable difficulties upon the business of the cooperative, it can practicably prevent any separation that is against the interest of the remaining majority (e.g. the separation of a lucrative division).

The most important consideration of deciding on a separation should be the kind of alteration of the organizational framework by which business efficiency could be enhanced the most successfully. In this spirit the membership should also be permitted to get rid of poorly performing divisions. None of the divisions of the cooperative should expect the others to keep it on the long run. This, too, could be a weapon against developing indolence.

The members separating for the purpose of forming a new cooperative should be working at the same unit of the organization (plant, division) or should be doing the same activity. It may be necessary to revise the stock of shares held by the members of the new small-cooperative formed by separation. The wealth the small-cooperative has at the time of separation – what it has brought along – or the future increment of its wealth originating from this asset is indivisible (except for the sharing fund).

Financial relationship between the small-cooperative and its members

The creation of the initial property of the cooperative is seldom helped by state support. Although conditions are given, it does not receive appreciable financial help from the common development funds of the cooperatives either. At the same time the shares the members subscribe (amounting to one month's salary) make only a fraction of the assets required for pursuing business activity. A greater financial contribution by members to the creation and increase of the cooperative's stock of assets does not seem feasible. According to the valid rules personal contributions to the initial property (e.g. shares or lendings by the membership) cannot be redeemed but in instalments and in accordance with the results of the cooperative. So it is not impossible that the contributions will be lost while, in spite of higher risk, the rate of interest on the credit will be the same as the rate of interest on personal deposits with the National Savings Bank (NSB).

Assets contributed to the property of the cooperative and the income they may earn belong to often disputed issues of the small-cooperative concept. As against the opinion that being a member no personal cooperation but merely financial contribution should be needed, we believe that only some combination of the two could be the basis of membership in the productive type small-cooperatives. The substitution of participation in common activity by membership based exclusively on financial interest is not compatible with the principles of cooperative policy. Personal participation could be realized through full-time or part-time jobs alike and could mean, beside operative (productive) activity, also intellectual supervision or professional consultation (for example the case of the inventor when the cooperative implements an invention) or the post of a foreman.

Differences of opinion also arise with respect to the point whether it should be stipulated that the initial property the small-cooperative owns at the time of its formation should financially fully cover the business of the first year or whether the founding members could be trusted to state the necessary amount of the starting funds. In our judgement for getting the approval it would be sufficient to stipulate the condition that the founding members are obliged to provide the funds necessary for starting and pursuing the business of the cooperative.

According to our recommendation the sources of the initial assets are the following: shares and special-purpose shares subscribed by the members; lendings by the membership; allocations from the Central Fund For The Development of Services; development funds and fixed assets made available by public organizations, cooperatives and state enterprises; loans raised from common cooperative funds; bank credits; funds allocated by the state.

The obligation to subscribe shares as a form of financial relationship attaching members to the cooperative should be invariably maintained in its present form. However, it is reasonable to stipulate in legal rules only the lower limit of the amount of the share, e.g. two month's salary of the member. The extent of subscribing shares will be laid

down in the articles of the cooperative and here an upper limit may also be stated to prevent any damage to the economic and financial stability of the cooperative caused by the withdrawal of certain members and the redeeming of their wealth. Other financial contributions of members (e.g. machines, premises, materials delivered to the cooperative) should be regarded as share and the value of any consequential excess subscription should be paid to the member within the term stated in the article.

The amount of the share must more pronouncedly express the members' financial responsibility, risk, liability, and the principle that the creation of the initial assets is the duty of the founding members in the first place. Therefore, according to some opinions, it would be reasonable to make it a binding stipulation to cover at least half of the starting assets from the financial contributions of the members. I personally believe that such a stipulation would be too severe. I also find it to be a contestable idea that by subscribing above the basic share the members' right to vote could be increased (to the extent of not more than by one-third of the votes in total). In my judgement the principle of "one member – one vote" should be invariably maintained.

In accordance with the current regulation the member will remain to be liable for the business activity of the cooperative up to the amount of his share and the share can be redeemed only when his membership has ceased. However, the rate of the dividend paid after the share has to be increased in order to increase the members' interest as owner and their responsibility towards the business of the cooperative. However, the greater part of the profit that could be divided – at least 60 percent is recommended by us – should be kept for sharing according to performance also in the future, and no more than 40 percent should be used for paying dividends. On the other hand, tax should be only levied on the amount of the dividends paid out to members in excess of the interests the National Savings Bank pays after term deposits for the interest on NSB deposits is not taxable either.

At present the dividend paid to members depends on their wage and the time they spent in the cooperative and not only on the share they hold. According to our proposal, the procedure of calculating the dividend of small-cooperatives ought to be reversed, that is, only the amount of the share should be taken into account. The time spent as member and the wage earned should be considered in allocating the share paid after work.

It appears to be right to elaborate and implement the institution of special-purpose shares attached to specified economic objectives and ventures of small-cooperatives. The dividend to be paid after the special-purpose share could be made dependent on the lucrativity of the given objective, the aggregate result of yearly business or some combination of the two. The latter would be a logical approach inasmuch as the aggregate result and the success of the given venture do not separate and are not separable.

The future role of lendings by the membership depends on the rate of interest that can be paid to them. If there is no way to increase the rate of interest then it is recommended that the cooperatives give preference to the special-purpose shares. Although it is a higher risk to subscribe special-purpose shares than to lend, yet the opportunity of earning profit is also better.

Although the membership of small-cooperatives are expected to provide substantially greater financial contribution than is the case with cooperatives existing at present state subventioning will be also indispensable for the formation of a sufficient number of small-cooperatives. For this purpose it will be of course necessary to state the criteria of allocation, bearing in mind the promotion of the most efficient ventures, furthermore, the allotment of subsidies will have to be strongly simplified and expedited especially in case of subsidies requested for small investment with quick returns. From the aspect of encouraging the formation of small-cooperatives it would be extremely important to grant exemption from or at least the reduction of taxation for a period of two years after formation. (Small entrepreneurs in services are also entitled to this facility.)

Although a newly formed small-cooperative has naturally not had the opportunity to pay its contribution to the common funds of the cooperatives, in case of satisfactory guarantee it should be made possible to raise medium and long term credits from the development funds both of the trade federation and of those administered by the National Federation (OKISZ).

It seems reasonable to set up a special credit cooperative for the purpose of making contributions to the initial assets of small-cooperatives and of satisfying the credit requirements of already functioning cooperatives. It could also be in charge of the publicity activities in connection with the formation of small-cooperatives and could assume the financial risk for the activity of the small-cooperatives against a suitable fee, etc. Maybe these functions could be discharged by savings cooperatives. (Similar functions were discharged in the early 50s by the cooperative credit institutions, including the Independent Credit Cooperative, and there also existed cooperative mutual insurance companies.)

It would facilitate the formation of small-cooperatives if cooperatives and state enterprises were allowed to cede their machines they actually do not use, especially when the small-cooperative undertakes a "background" industrial activity.

Regulation of the division of property in case of separation needs further study. Difficulties may be involved especially where the division that becomes independent operates a stock of fixed assets far above its share on the basis of membership. It may be considered to be a solution in connection with the division of property to transfer the quota of the property originally state, trade federation or national federation support (allocation) without redemption.

According to the cooperative principles, the property of the small-cooperative, too, will consist of a part that can be divided between the members and from an indivisible part, a point which is considered when a member quits or when the cooperative is wound-up. It is another question that within the property of the small-cooperative – in connection with the bigger ratio of personal financial contributions of members – the share of the divisible property may be bigger.

It is a principle valid also for small-cooperatives that the liability of members is limited by their subscribed shares in case of loss, lack of funds or winding-up; for the liabilities the cooperative is responsible with its own property. The idea of an insurance

scheme also emerged whereby the winding-up of the cooperative would be assumed against a suitable amount of premium and the creditors and members would be satisfied in case of a winding-up.

Regulations of the building-up of funds should be devised so as to help the functioning of the cooperative and the meeting of its liabilities towards third parties also when the circumstances take a disadvantageous turn. Accordingly, it ought to be binding to form a reserve (risk) fund as well as a renewal fund; on the other hand, the cooperative would be free to decide on the formation of a development fund.

Autonomy, representation, state supervision

The setting up of all the elected corporate bodies stipulated by the law on cooperatives is neither justified nor allowed by the small number of members. At the same time, a broader right of the membership to have their say and to participate in decision-making is required.

Since the general assembly of the cooperative with few members – the highest organization of cooperative autonomy – is in charge of operative functions too, it is reasonable to convene it quarterly. Beside the issues belonging at present to its sphere of competence the general assembly may decide, among others, on the admission of new members, disciplinary and compensation affairs, labour disputes etc.

Between two sessions of the general assembly a three-man board would discharge the functions of the leadership and of the different committees. The supervisory board should consist of not more than three members. The president of the cooperative heading the leadership will not be necessarily full-time. For cooperatives with less than 30 members it is a point with consideration whether any corporate body other than the general assembly is required. The trade federations of industrial cooperatives or the National Federation (OKISZ) should be in charge of representing and safeguarding the interests of small-cooperatives. It will be the duty of the federations to promote the formation of small-cooperatives. Regulation of sectoral supervision as well as control by specialized council authorities and the legal supervision should be shaped so as to prevent their becoming bureaucratic and that they impede the activities of the cooperatives, while assuring that their activities be legitimate.

Specialized industrial cooperative groups

Part worktimes of workers having otherwise full-time jobs can be utilized the best in the framework of specialized cooperative groups. This scheme could be suitable for at least partially combating the "own account" activities and for satisfying demand for activities that cannot be really satisfied in any other organized way. From the customers' point of view this has the great advantage over incompetent and "own account" work that their legitimate claims can be enforced in case of work done in bad quality.

The specialized industrial cooperative groups should perform after the model of the agricultural cooperative group, productive or service activities adjusted to the line of the "mother" cooperative. It would act as an autonomous organization within the cooperative having a certain economic independence and own economic accounting. Though the capacity of the legal entity would be vested in the "mother" cooperative, the specialized group would sign and carry out its contracts independently, on its own risk and responsibility. According to the scheme we recommend, the formation of a specialized group would require not less than five members and the approval of the general assembly (meeting of representatives) of the "mother" cooperative. The members of the specialized group would become cooperative members of the group irrespectively of any membership held in the "mother" cooperative.

The members of the specialized groups must not necessarily work at the same workplace and regulation of their worktime and working system may be conveniently flexible too: except for any full-time members of the group they may do their work at any time during their leisure. It is also conceivable that members would be authorized by the specialized group to independently take orders and to settle the accounts with the party placing the order.

Provision of the funds required for being formed should be the obligation of the founding members of the group. However, it should be also allowed that the "mother" cooperative's own means of production and premises be ceded for durable use. It is also imaginable that the "mother" cooperative would authorize the members of the group to use the workshop and equipment of the cooperative after working hours, provided that the cooperative property is carefully safeguarded. Material supply to the specialized group could be provided through the "mother" cooperative's system of material supply. The "mother" cooperative might also take orders for the specialized group through its own network and to pursue marketing, publicity and advertising activities on its behalf.

The leading organization of the specialized group is the meeting of members which is entitled to decide on every issue. Between two meetings of the members a director appointed by the meeting of the members should be in charge of decision-making.

The members of the specialized groups will be reponsible for the debts of the group to the extent of their own financial contribution. The "mother" organization will be responsible for the property transferred for the purpose of the group and for debts exceeding that with its other property. The property coming about as a result of the activity of the group will be the common property of the members. The property of a ceasing specialized group may be distributed between the members in accordance with their financial or personal contribution – except for the property transferred by the "mother" cooperative and its increment if any.

Further development of the "lump-sum system"

The "lump-sum system" has proven to be a successful form of business. However, two years ago new measures were taken whereby the conditions of the "lump-sum" substantially deteriorated. Certain activities were removed from the scope of this system and stipulations were made to the detriment of the financial incentive of people working under this scheme. Consequently many a contract were cancelled; several service activities ceased or were transferred to the secondary economy.

It seems to be expedient to apply the "lump-sum system" more extensively. For this purpose it would be reasonable to allow to operate units in this system in any field of consumer services and, perhaps also in the production of commodities, leaving it to the discretion of the territorially competent local council to specify the field of any given local activity where this system is found to be serviceable. Furthermore, the staff of the units should be allowed to consist of 1 to 10 persons instead of the present two, also making it possible to employ the work of family members, furthermore, of members and employees of the cooperative and not only full-time but also part-time in each unit.

The right to run the units selected for transformation into the "lump-sum" type would be assigned through tender to the individual or collective, who undertake to produce the biggest turnover or profit; the members of the cooperative would be given priority among those submitting tenders. It would be expedient to sign the lump-sum contracts for a term of 2 or 3 years. As a rule this period of time is necessary to win a suitable circle of customers and to pay to the contractor. On termination of the contract the tender would be repeated.

The contractor should be allowed to decide on the hours of the service unit he keeps as he thinks best, also considering the demands of the public (perhaps he would open only in the afternoon or in the evening). Naturally, this should be coordinated with the local councils.

*

The models outlined above fall within the bounds of the valid cooperative act and are in line both with the Hungarian and the internationally accepted principles of the cooperative movement.

The simpler forms of cooperatives may offer alternatives mainly for cooperatives with low profitability or for those having oversize non-productive and administrative apparatus, moreover, even for cooperatives with efficient business management. Further reserves may be explored through updating the cooperative. The objective is to enchance economic competition by means of new forms of enterprising. Thus the development of the cooperative and even of the state sector would be stimulated.

The practical implementation of the simpler forms of cooperatives strongly depends on the public and political repercussions and on the attitude of the competent central and regional organizations. Their support is particularly important at the start.

These issues have social and political "charge" and thus their unambiguous statement is essential. The joining of the citizens in and the contribution of their individual saving to such cooperatives require a suitable security and long-term stability of the political judgement of the new forms.

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УСЛОВИЯ СОЗДАНИЯ ПРОСТЕЙШИХ ФОРМ КООПЕРАЦИИ В ПРОМЫШЛЕННОСТИ

Л. КОНЬЯ

Венгерская промышленность характеризуется высокой концентрацией и излишней централизацией производства, причем доля малых и средних предприятий и кооперативов низкая. Сузились рыночные отношения и уменьшилась приспособляемость экономики вследствие присоединения малых и средних предприятий к крупным и насильственного слияния кооперативов. Одновременно спрос как на рынке товаров потребления так и на рынке средств производства, повышается на предметы, произведенные в малых и средних сериях или уникально. То-есть спрос требует широкого ассортимента, и в то же время возрастает в нем доля услуг. Таким требованиям наиболее эффективно могут отвечать хозяйственные единицы малых и средних размеров, но их количество недостаточно.

Поэтому неизбежно создание малых новых предприятий. Это можно осуществить путем децентрализации некоторых больших кооперативов с разнообразной сферой деятельности (например выделением некоторых цехов или получением самостоятельности), далее формированием новых малых кооперативов.

Для малых организаций надо выработать подходящую простую систему учета, заинтересованности и налогов потому, что сегодняшние сложные системы не отвечают требованиям этих организаций. Целесообразно усилить заинтересованность и чувство собственности также путем большего привлечения личных сбережений членов — вознаграждаемого соответствующими дивидендами — для финансирования целей развития кооператива. Простейшие кооперативные формы: малый кооператив, который является самостоятельным юридическим лицом, где работает 15—100 лиц, специализированная группа промышленного кооператива, которая, имея большую самостоятельность, работает в рамках материнского кооператива, но не является самостоятельным юридическим лицом, минимально 5 работников входят в ее состав; а также паушальная система расчетов, ныне существующая, которая и в случае ее усовершенствования могла бы приобрести большую роль, особенно при включении в такую систему хозяйственных единиц сферы обслуживания с небольшим рабочим персоналом.

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A. KLINGER

POPULATION, DEMOGRAPHIC POLICY AND ITS INSTRUMENTS IN HUNGARY

Demographic questions are again on the order of the day in Hungary. In the last decade – particularly in the second half of the seventies – demographic processes took an unfavourable turn. With an invariably low level of fertility and recurring fluctuations in the number of live births, mortality gradually deteriorated – in some age groups even considerably. The process of ageing of the population accelerated, conditions for a lasting decrease in population became established. The presently unfavourable demographic situation is partly a result of a demographic process in course for some decades already and generally characteristic of economically advanced countries. On the other hand, the Hungarian demographic process has some specific features which became particularly obvious in the last decade and which are closely related to the social, economic, cultural and consciousness transformation started 36 years ago. It is, therefore, necessary and useful to survey the development of the present demographic situation embedded in the historical past and to outline future prospects on this basis. At the same time, it is expedient to examine the attempts up to now to influence the demographic processes and how the system of instruments is used to help to attain the goals set. This is topical also because the changed demographic situation requires us to expand the contents and goals of demographic policy and to complement its principles and system of instruments.

The economic and social development accelerating at the beginning of the last century resulted in a slowly and steadily decreasing mortality first in North-West Europe pioneering in capitalization. With some phase lag a subsequent decrease in fertility followed. This basic declining trend of mortality and fertility, two symptoms of demographical changes, has persisted till now in the economically advanced countries.

This process is termed in the literature as *demographic transition* or change in demographic era. It is a secular transition from the state of high-rate mortality and fertility into the state low-rate mortality and fertility.

Demographic trends till the 1950s

Dependable data about the population of Hungary are available as from the seventies of the past century. These data show that the demographic transition began in this country later and proceeded at a faster rate than in North-West Europe.

In the second half of the 1880s the number of annual actual live births was 46 and of death cases 37 per 1000 inhabitants. The natural increase thus amounted to 9 per mille. Both the birth rate and the mortality rate were among the highest ones in Europe

at that time. Along with the parallelly decreasing rates of live births and mortality, the 9 per mille reproduction rate was maintained until the second half of the 1920s. Between 1876 and 1930, the index numbers of births and mortality decreased by about 20 per mille. This means that over a historically extremely short period of time, hardly exceeding half a century, the fertility and mortality of the Hungarian population went through a profound change. The birth rate of the period between 1926 and 1930 was 57 per cent of this rate for the period between 1876 and 1880, while the mortality rate of the second half of the 1920s was only 47 percent of the value half a century before. The almost linear development was disturbed by the first war: between 1915 and 1918 a natural decrease took place, mostly because of the low birth rate.

The real turning point came in the first half of the 1930s: from 1931 on the decrease of the live birth rate significantly exceeded that of the mortality rate and thus the rate of natural increase began to drop rather steeply.

In the 1930s there was still a possibility for the increase of fertility but for the decrease of mortality there was not any in the given social and public health conditions. Consequently, the number of live births per 1000 people dropped to below 20 from the second half of the 1930s. This means that the order of magnitude in which the live birth rate has been ever since moving – though with steadily decreasing tendency – was attained 40 or 50 years ago.

This also meant at the same time that, due to her rate of fertility decreasing faster than the international average, Hungary was transferred in the thirties from the group of countries with the highest fertility into the medium group and maintained this position till the late fifties.

The usual post-war upswing of births lasted for about four years after the liberation. Then, from 1951 on the live birth rate began to decrease and scored under 20 per mille again in 1952. That is, by then the *indirect* influence of the war had settled and the live birth rate was shaping according to the basic peace-time trend.

This basic feature of the changes in fertility was not realized at that time. The demographic policy of the first half of the fifties wanted to force people to something which they cannot be forced (durably) to do, namely, to give birth to more children than they intended. The decree practically prohibiting the interruption of pregnancy was really effective for only one year, 1954. In that year the actual birth rate was 23 per 1000 people. The unnatural degree of this rate can be judged from the fact that its value decreased by 1.6 per mille the next year, that is, considering the nature and the order of magnitude of the symptom, significantly. This is an unmistakable evidence that the demographic policy should not revert to coercive means.

In June 1956 a new decision was taken, legalizing the interruption of pregnancy practically unconditionally up to the 12th week of pregnancy. 25 years ago, with no other means given, this ruling was a humanitarian one.

In 1956 the live birth rate dropped again under 20 per mille: the downward trend of fertility that had begun at the end of the last century, and accelerated in the 1930s, continued. What was extraordinary in the decade after 1956 was the rate of decrease. In a

few years' time the live birth rate fell to a value in the range of 13 per mille which was the world's lowest in the first half of the 1960s.

This symptom could have had many causes. It was probably affected by reaction to the policy of the fifties: too early birth cases under the pressure or, on the contrary, births postponed in the hope for better living conditions, as well as by the circumstance that the institutional opportunity for "free abortion" was given for the first time. However, these causes were only secondary ones and were merely amplifying and accelerating a process that had been going on for several decades.

Actually the following happened: the ideal of a small family – as a rule with two children – became generally popular in the Hungarian society by the early 1960s, and the means, whatever primitive, and especially free abortion, were given to attain this ideal.

Industrialization and urbanization firstly reduced the populousness of the peasantry showing higher fertility, and with the spreading of schooling and the levelling of socio-economic differences the small two-generation family – often with two children – began to prevail in strata that used to be more reproductive. The impact of schooling was dual: in part, people were made more inclined to accept the small family ideal, an implication of development and, in part, the earlier participation of children in production gradually decreased especially in the peasantry, moreover, the accompanying benefits were replaced by the financial burdens of schooling. *As reasonable it was to increase the size of the family as a unit of production so reasonable it was to decrease it as a unit of consumption.*

The actual level of fertility is illustrated by the *total fertility rate* expressing the number of children a woman would give birth to during her lifetime, assuming that she would live for her whole fertile age and would be affected by the age-specific fertility rates in any given year.

The basic downward trend of fertility is shown extremely convincingly by the changes in the total fertility rate in Hungary from the turn of the century till the sixties, also exhibiting the events of the fifties.

Table 1
Total fertility rate (1900–1962)

Year	Number of children	Year	Number of children
1900	5.32	1950	2.57
1910	4.86	1952	2.47
1920	3.80	1954	2.97
1930	2.85	1960	2.02
1940	2.45	1962	1.80

Demographic trends in the past two decades

The drastic fall in the birth rate that had begun in the second half of the fifties reached the lowest value in the early sixties but became stabilized thereafter until the end of that decade on such a low level that was insufficient even for the replacement of the population in the long run.

The decreasing fertility of the sixties and the resulting smaller family size called attention to the demographic situation in this country and made it acutely necessary to elaborate a long-term demographic policy integrated with the general social and economic policy. The outlines of that policy began to take shape in the second half of the sixties but comprehensive demographic policy measures embracing every field were introduced first in 1973. Partly on that account *the number of live births surged* in 1974–76 and came near to or over 190.000; that is, though on a lower average level, the demographic peak of the years 1953–55 repeated itself as if a "reflection" of the peak of that period. The significant temporary increase in the live birth rate was attributable mostly *to the birth of desired children earlier than planned* and to the higher number of women in the reproductive age, together with a slight increase in fertility. (The populous cohorts born between 1953 and 1956 entered the fertile age in these years.)

The indexes of total fertility showed the following changes in the seventies:

Table 2
Total fertility (1973–1980)

Year	Number of children	Year	Number of children
1973	1.95	1977	2.17
1974	2.30	1978	2.08
1975	2.38	1979	2.02
1976	2.26	1980	1.90

Thus the live birth rate steeply fell since 1977. This fact is attributable mostly to the decreasing number of women in the reproductive age and *to children "missing" because of advanced childbirths* in earlier years. In 1979 the number of live births was 160.000, and the trend invariably showed a decline.

In 1980, 149.000 children were born which is equal to a live birth rate of 13.9 per mille. This is lower than in the year 1973, and is also less than in the years 1967–69 when, under the influence of introducing the child-care allowance, this rate increased to the value of 15 per mille.

The Hungarian birth rates of the sixties were the lowest in Europe and, consequently, all over the world but this state of affairs changed by the seventies. The 15.3 per mille average live birth rate of the first half of that decade was still below the European

average, but it was much higher than that in the FRG and in the GDR (11.6 and 12.1, resp.), in Finland and in Sweden (13.1 and 13.7 per mille, resp.), and also in Austria, Belgium and Denmark lower live birth rates were recorded than in Hungary.

In the second half of the seventies the live birth rates showed a steep decrease in most of the Western countries. For this reason most countries show much lower live birth rates than that envisaged in Hungary for 1980. According to data for 1978 and 1979, the live birth rate per 1000 inhabitants was below 10 in the FRG, 11 in Austria, 12 in Denmark, Sweden, Britain and Switzerland, while in Finland, France and Japan the rate was in the range of Hungary's today. Rates higher than the Hungarian one are found only in Southern Europe (Greece, Spain, Portugal). In the socialist countries, however, the live birth rate is higher – and usually increasing –; only the GDR shows the same rate as Hungary's. In 1979 the number of live births per 1000 inhabitants was 15 in Bulgaria, 17 in Jugoslavia, 18 in Czechoslovakia and the Soviet-Union, and 20 in Romania and Poland.

The decrease of the birth rate in the second half of the 1970s in the majority of Western European countries as well as in the United States, Australia and Japan *indicates a decrease of population in the long run.* From the European socialist countries the GDR and Hungary are in similar position. Forecasters in Bulgaria and Jugoslavia predict stagnation of the population whereas in the Soviet Union, Poland, Czechoslovakia and Romania a population increase was forecast even in the last decade.

As far as the current demographic situation in Hungary, namely, the deteriorating process of reproduction as from the last third of the seventies is concerned, this was caused by the combined impact of a number of *partly foreseen and partly unforeseen factors.*

Forecasts anticipate a decreasing number of both marriages and live births because of the gradually decreasing number of young women who would get married or give birth to their first child. The cohorts born at the time of the 1953–55 demographic wave have namely already got married and have had their first, moreover, their second child. At present the cohorts born in the early sixties with low birth rate are getting married. The number of women aged 20 to 24 years who influence the number of marriages and births the most strongly is now only 400.000, that is, about 60.000 less than a few years ago. This trend is going to get stronger in the future and the population of the age group mentioned will fall to about 300.000 by the end of the 80s.

1979 data already indicated that the decrease of the birth rate is bigger than expected. *In 1980 the main indicators characteristic of the demographic situation became still worse.* The live birth rate dropped by another 7 percent while mortality – showing a deterioration ever since the mid-sixties – recorded its maximum till now and was by 6 percent higher than in 1979. In consequence, the increase of population has practically come to a halt. Also the number of marriages kept decreasing. In 1980 there were 7.5 weddings per 1000 inhabitants, by over 20 percent less than in 1975–76. There are many reasons for the steady and persistent decrease:

1. in recent years the age groups where marriage is the most frequent have been less populous;

2. part of the marriages are postponed to a later date;

3. also the rate of re-marrying is on the decrease.

This process can only be accelerated by the fact that *the rate of divorcees increases* among women in reproductive age. Data of the 2-percent sample of the 1980 census show that there was hardly more than 1 percent decrease in the number of women in the reproductive age (15 to 49) over the past ten years while, at the same time, the number of divorced women in the same age group increased from 139.000 to 207.000. Data also clearly show that irrespectively of their age, divorced women have fewer children on the average than married ones. It is also a fact that in 1980 divorced women had on the average a somewhat bigger number of children than those in similar marital status in 1970. But this only testifies that *the cohesive influence of the child upon unhappy marriages is less powerful now than it used to be in the past.*

Latest census data also show that the average family size of married women is on the decrease, too. If the reproduction of the population is considered from the side of the required average number of children by family then it may be assumed that an average of 2.3 children ought to be born in each family to provide for the replacement of the population.

At the same time, it has been proven by every study on family planning that most young people get married with the idea of hoping to have two children in the family. That family size was preferred in 1958 by 64 from 100 people to be married by 74 in 1977. On the other hand the share of married couples getting married *ab ovo* with the intention to live without children is extremely low, only 1 or 2 couples. The share of those planning to have one child showed remarkable fluctuations in the past twenty years: it increased from 13 to 20 percent till 1966 then decreased to 6 percent in 1974, and has increased again afterwards. The share of those planning three and more children changed in reverse direction and proportion, decreasing significantly till 1966, from 22 to 9 percent, strongly increasing in 1974 – mainly owing to the demographic policy measures – reaching 21 percent, and decreasing thereafter.

However, with respect to the individual families, the family plans are not or cannot be accomplished according to the original idea. There may be deliberate changes but there may also happen unintended excesses or failures in the course of a marriage. It is, namely, obviously impossible even for health and biological reasons that from 100 marriageables only 1 or 2 couples should be left without children; the minimum number is in the range of 5 or 6. For similar reasons, at least 10 percent of the couples cannot have more but one child.

The chance is the best for attaining the family size of two children, but not so high as the prospective couples plan it when they get married. Most of those who will later on be childless or have a single child come from among those planning two children, while others deliberately choose the one-child family size instead of the originally planned two children. It is quite characteristic of people planning three or more children to modify their family plan downwards later on, and it is a less frequent case if couples planning two children reach bigger family size later on, with or without intention.

Lagging behind and over-fulfilment of the original plans have normally levelled out and have therefore not affected the original average family size appreciably. The results of studies on family planning gave a fair indication of the trends in the changing family size during the past 20 years in the aggregate, even if they did not always hold for the individual families.

If we should like to have an idea of the future on this basis then the ideas of young people getting married or living in marriage now, as well as the chances of fulfilment have to be taken into account. Two points must be seen clearly. Firstly, young married females – under 25 years of age – of today have more living children than those of similar age used to have 10 or 20 years ago, and, therefore, in principle the possibility is given that their lifetime fertility and thereby their average family size will be bigger. But it may be that this is simply an outcome of the last wave of births manifesting itself temporarily because – and this is the second fact – at present young people do not plan or want more children than those of twenty years ago. It should be added that if the present older generation could successfully carry out its family plans (as is shown by the level of their completed fertility) then the young people of today can be even less expected to give unintended birth to more children than they want.

However, it is worth noting that on the average much more people complete their fertility with one child than who planned to do so. In other terms this means that the future demographic policy measures – while maintaining to advocate the three-child family type – must have the new aim of giving more *effective encouragement to the birth of second infants. This is justified also because generalization of the three-child family ideal has proven to be an unrealistic goal and, therefore, the first and foremost objective of the coming years must not be to raise the fertility level but to moderate its further decrease.*

Future demographic trends

Two estimates are available for the future fertility rate:

a) According to the first one the powerful decrease of fertility that began in 1976 is going to continue until 1986 and from that time on fertility calculated by cohorts will remain unchanged.

b) According to the second one the rapid decrease of fertility will come to an end in 1980, from then the rate of decrease will be much slower until 1986, and a balanced state is expected by 1990. In this case, fertility would stabilize on the 1978 level.

Trends of the year 1980 and findings of the latest various analyses suggest that the more pessimistic version a) will assert itself in the coming five-year period. The post-1986 period is more difficult to foresee and its trends will be determined by the further facilities that will become available for stimulating the inclination to childbirth.

A presentation of the probable future population would not be complete without outlining the *expected trend of mortality.* As in the case of the basic trend of fertility, two solid references are available: our knowledge of the current and the prospective

distribution of the population by age groups and the conditions of mortality in the late seventies. If the unfavourable changes in the age-specific mortality rates continue with the same speed until 1985, with a subsequent halving of the magnitude of their increase then, considering the "ageing" of the population, mortality will keep on increasing until the end of the millennium. The crude mortality rate estimated for 2000 will be probably 14.3 per mille on this basis as against 13.6 per mille today.

Since the balance of the live birth rate and the mortality rate will be most likely negative in the case of either fertility version, or, putting it in another way, live births will be durably outnumbered by deaths, the population's decrease till the turn of the millennium appears to be inevitable. Depending on whether the favourable version b) or the unfavourable version a) comes true, the decrease can amount to 20 thousand and even to 400 thousand. It follows that the predictable population of Hungary will be in 2000 between 10 million 690 thousand and 10 million 310 thousand, as against 10 million and 710 thousand in the year 1980.

Demographic policy

Demographic policy in the broader sense means all the government measures aimed at influencing the demographic processes, whereas in the narrower sense it means the *influencing* of the birth rate, ie., the *number of children* (family size). The Hungarian demographic measures now in force consider the influencing of the birth rate to be the basic objective.

It is an essential point whether "social policy" (or "family policy") and *demographic policy* should be regarded as identical or as different notions. The two notions are often confused also in Hungary, mainly because the instruments of the two kinds of policy are often similar. It is an increasingly widespread approach to claim that the *basic objective of social or family policy is not to allow great differences between* the incomes and, consequently, *the living standards* of different families caused by family size or age composition. That is, the fundamental family policy measures are intended to work towards the financial levelling of families in different situations. On the other hand, the *demographic policy measures are intended to provide better conditions for those families that satisfy certain demographic policy objectives.* In such an approach the *demographic policy is,* as a rule, *"discriminatory":* it gives greater help to certain family types and no help to others.

The demographic policy measures can be of many kinds even if the objective they serve is the same. It is an accepted opinion that neither of them is suitable alone to affect the demographic behaviour of every family. Therefore, most countries where demographic policy has become an important part of the national policy complex demographic policies were elaborated in the seventies. These essentially make certain combinations of assets available to families. This is especially typical of the European socialist countries where demographic policy became part of the general social and economic planning in the last decade, and its measures are aimed at increasing or stabilizing family size.

The Hungarian demographic policy declared in 1973 shows many similarities to those of countries where the demographic state of affairs is, like ours, characterized by a low fertility rate. This policy is unique inasmuch as it integrated the tasks with a complexity unprecedented in Europe. The basic objective was the same as the one specified in a good many countries of the world: *to establish a fertility level suitable for securing replacement.* However, also a complementary and not at all secondary objective was formulated: *to attain a demographic situation where the population of the generations to be born should not show drastic annual fluctuations.* This, too, was a special objective: namely, the demographic processes of Hungary produced unique birth peaks and birth throughs in the past decades. It was not even possible to aim at eliminating these completely, for the differences in the parent generation repeat themselves by the nature of things in the offspring generation, but the *excessive* differences may be eliminated, provided that the proper measures are taken.

Major elements of the Hungarian demographic policy instruments

Material and financial assistance

The main purpose of these subsidies is to reduce income differences resulting from the number of children (as noted above, this is a social policy objective), that is, to allocate pronouncedly higher amounts of money to families with a certain number of children (this is already a demographic policy objective).

The most general means of material-financial aid is the *family allowance.*

Under the influence of the 1973 demographic policy measures the amount of money paid out in this country on family allowance more than doubled between 1974 and 1980. This was caused by the increasing number of families on one hand and by the increasing amounts of the family allowance on the other hand. The family allowance was, namely, raised four times as from 1974 (to families having two children in 1974, to all of them in 1975, 1976 and 1979 – in part because of price rises – and specifically to those with three children in 1980).

The pronouncedly higher family allowance paid to families with three children is a very important element of the present system. According to the demographic policy objective, for the purpose of increasing the number of third children the family allowance paid after the third child is nearly twice as much as that after the second child. For a similar purpose, the difference is still bigger in the GDR (two and a half times), and it is by 80 percent more in Bulgaria, Poland (and France). On the other hand, the difference only amounts to one-third in Czechoslovakia and to 10 percent in Romania.

It is another characteristic feature of the Hungarian system that no family allowance is paid after the first child; in all socialist countries allowance is paid, even if less than after the second child.

It might be discussed whether it is sufficient to begin to assist families from the second child on or not. The fact that the nursing problems of the parents begin already with the first infant, moreover, due to their young age as well as their income and housing conditions the financial problems appear to be the most difficult exactly at the birth of the first child, it might be raised that perhaps those countries are right where the families are entitled to assistance already after the first child. In this case the originally planned second childbirth is, namely, not relinquished because of the difficulties encountered in connection with the first child. One could imagine a solution where the first child entitles to family allowance only for a certain period of time and it is discontinued unless a second child has been born before its termination.

The actual value of the family allowance is indicated by its growing proportion to the average monthly earning. In Hungary the amount of family allowance paid to families with three children increased from 38 percent in 1973 to approximately 50 percent in 1980 relative to the average monthly earnings. This rate is similar in Bulgaria but it only amounts to one-third in Czechoslovakia, Poland and Romania, and to one-fifth in the GDR (this latter share holds also for France).

The families are assisted also by non-recurring allocations. The most important one of these is the so-called *maternity aid.* The amount of money now paid for that purpose, 2500 forints, is relatively modest by international comparison (relative to the average monthly earnings). Besides, it does not contain any demographic policy objective, that is, the amount does not depend on the number of children. This latter system is applied in Bulgaria (where the maternity allowance paid after the birth of the third child is five times more than after the first child), and is going to be similar in France from 1981 on where the parent will be entitled to a very high premium (of 10 thousand Francs, almost four times the normal allowance) when the third child is born. Also the Romanian system of aid is of this kind, the allowance is paid there only as from the birth of the second child.

In certain countries families are helped by tax reductions. In certain countries the income tax is reduced or is progressively abated depending on the number of children. (This is the case in Czechoslovakia, the GDR, and nearly every Western country.) In some countries "childlessness" or "bachelor" taxes are still applied; the termination of that state assures higher income to the families. (This is the case in Bulgaria and Romania.) This can often mean a more marked "net income benefit" than the social insurance aid actually paid out.

Benefits in time and in kind

The benefits granted to working mothers for the time of childbirth or nursing are significant. These benefits are of different types.

Maternity leave. It is known in many advanced countries. This benefit is actually a kind of paid leave which the working mother may take after (or directly before) childbirth. In Hungary its duration is 20 weeks and the mother is entitled to her whole

salary for this period. There are countries where the duration of the maternity leave also differs according to the number of children born – that is, the measure is also of demographic policy nature. In Bulgaria the gravidity and puerperal leave granted to working mothers is 17 weeks after the first child, 21 after the second, and 26 after the third and more infants. In Poland this is 16 weeks after the birth of the first child, and 18 weeks after the further ones. In France normally only 16 weeks are given, but from 1981 on 26 weeks are granted after the third and further infants. This leave also lasts for 26 weeks in Czechoslovakia and the GDR. In most socialist countries, like in Hungary, the whole salary is paid for the period of the leave but in some countries (Czechoslovakia, the GDR, France) only 90 percent (in France the whole salary is paid after the third child).

Child-care allowance. This benefit is a unique instrument of the Hungarian demographic policy. It was introduced – in 1967 – for the first time in the world in Hungary. This allows the working mother to rear the child at home until it becomes three years old, and is paid for that by the social insurance service an amount equal to 25 to 40 percent of the average monthly salary. Since 1974 the amount of this allowance is differentiated according to the number of children (800 forints after one child, 900 after two children, and 1000 after three and more children).

Till now this has been the most generally used demographic policy instrument: about 90 percent of working mothers avail themselves of it, even if not for the whole possible period. At the end of 1973 195 thousand and at the end of 1979 264 thousand mothers benefited from the child care allowance, and the amount of money paid out for that purpose increased almost two and a half times. Taking advantage of the child care allowance creates certain tension in the already strained labour market. This is shown by the fact that at the end of 1979, 5.5 percent of all employees availed themselves of the child care allowance (in 1973 only 4 percent). In certain sectors, where female employment represents a higher share, this percentage is even more significant (for example 18 percent in the textile garment industry, 14 in the textile industry and 13 in the leather, fur and footwear industry). However, we must insist on the principle and try to solve the labour problems of today by trying to ease those of tomorrow, in other words, demographic policy enjoys priority over the current manpower policy.

In recent years several other socialist countries also introduced a scheme of aid similar to the Hungarian one but far below its scale. Thus in Bulgaria working mothers are granted an aid equivalent to 55 percent of the average income until the first birthday of their infant. Such grant is available in the GDR also until the first birthday of the child but only from the second child on. It amounts to 50 percent of the actual salary of the mother. In Czechoslovakia child care allowance is available until the child is two years old, but here, too, only from the second child on. Its amount is varied (in the range of 20 to 50 percent of the average income) depending on the number of children under two years of age reared in the family.

Preferential working time and sick-pay. Further measures providing facilities for the period of pregnancy and child care (especially the nursing of sick infants) were

effected in 1974. Such is the extension of the right to sick-pay for nursing sick children (for yearly 60 days after children under 3 years of age and 30 days after children of 3 to 6 years of age). In addition to the monthly one day unpaid leave already granted earlier, working woman must be granted yearly 2 days paid holidays in case of one child under 14,5 days with two children under 14, and 9 days if they have 3 or more children under 14. The sick-pay for nursing sick children was utilized rather extensively: the daily average of beneficiaries of sick-pay under this title increased from 13 thousand to 21 thousand between 1973 and 1979, which means that 0.5 percent of workers are absent under this title on a daily average.

As a rule, the other socialist countries grant similar facilities to working females for the purpose of nursing and attending to sick children. In this field Bulgaria tops the list: there the allowance for nursing sick infants is available without limitation until the child is 2 years old – corresponding to the amount of the child care allowance – and, besides, yearly 60 days sick-pay may be granted until the child is 16 years old.

Allocations in kind

It is an accepted opinion that allocations in kind society extends to young couples or to families with young babies are more helpful to the families than direct financial aid. Here belong the setting up of a network of child welfare institutions, the free pediatric service and free schooling, as well as the various preferences granted in housing affairs.

Child welfare institutions. As a result of the measures taken in 1973, the most significant improvement was recorded in Hungary in the development of child welfare institutions. The network of child welfare institutions was appreciably expanded from central state funds, with investments by local councils, efforts by enterprises and institutions as well as voluntary work.

The number of accommodations in infant *nurseries* increased by 16 thousand and exceeded 61 thousand at the end of 1979. It is nevertheless a chronic problem that nurseries are overcrowded: an average of 127 infants are actually admitted for one hundred vacancies but, mainly because of illnesses, the true rate of exploitation of the vacancies is only 86 percent on the average: at the end of 1979, 15 percent of infants in the corresponding age were accommodated in nurseries (in 1973 this rate was 12 percent). This is apparently a fairly low rate and, therefore, it is intended to develop the nursery network much more powerfully. (The creation of 9 to 10 thousand nursery vacancies is planned for the 6th five-year plan period.) But if it is reckoned that mothers can nurse many of the children under 3 at home with social benefits: maternity and child care allowances, then more than half of the children under 3 of working mothers who do not avail themselves of this allowance are reared in nurseries. In the neighbouring socialist countries, in lack of the general child care allowance scheme, the rate of nursery supply is generally higher: in Bulgaria and Czechoslovakia it is 20 percent, in the GDR 60 percent, the world's highest; and in Poland and Romania it is below 10 percent.

The most striking development was carried out during the past period in respect of *kindergartens.* At the end of 1979 the number of kindergarten accommodations amounted to 364 thousand, by 110 thousand more than in 1973. In spite of the robust increase tens of thousands of children had to be refused because of lack of accommodation, owing to the increasing number of children belonging to the cohorts in question. Kindergartens are also owercrowded: as a rule they have to admit 126 children for 100 vacancies on the average. Yet the development is apparent: in 1979, 85 percent of children of the corresponding age-group could go to kindergarten (as against only 66 percent of a less populous generation in 1973). This rate is already a high one also by international comparison: kindergarten supply is 90 percent in the GDR, 80 percent in Czechoslovakia, and 77 percent in Bulgaria, it is below 50 percent in Romania and 40 percent in Poland. The building of 30–35 thousand kindergarten accommodations is planned for the 6th five-year plan and thus, considering also the predictably decreasing number of children, every applicant will be able to go to kindergarten.

The quantitative and qualitative improvement of the day-time boarding of pupils in primary schools is a task of special importance. The rate of pupils getting day-time boarding has namely increased significantly (from 25 percent in 1973 to 37 percent), but this is still not enough, and the quality and serving of meals is not up to the required standard. Development in this field will be an important task in the coming period.

Housing preferences. For the purpose of implementing the demographic policy objectives it is an important – and perhaps the most difficult – task to improve the housing conditions to an extent as to help the young couples to adequate dwelling as soon as possible, and to provide dwellings of appropriate size for families with children.

The preferences granted to young couples and parents with many children were increased in this field by the housing regulations adopted at the end of 1980. It is considered to be a significant development that young couples get assistance through housing loans, social policy allowance and allocation of flats owned by councils. It is similarly a great achievement of the recent past that the exchange of dwellings of families with three or more children for larger ones was backed: between 1974 and 1979, more than 25 thousand families with several children moved to bigger flats of better standard. However, the growing demand is shown by the fact that at end of 1979, 12 thousand families having three or more children were waiting for more suitable flats.

A direct relationship between housing conditions and the number of children cannot be proved. On the contrary, certain preferences have rather social policy than demographic policy outcome. Thus many of the beneficiaries of social policy allowance prefer to refund the loan raised this way to having a second child. So this grant does not contribute to increasing the number of children (families benefiting from it are less reproductive than the average). It must be nevertheless maintained and extended as far as it is possible for it can help young people in getting a flat, ie., it can significantly improve their living conditions. Some data of a sample survey show how important this is. In Hungary only 19 percent of the young couples start living in a flat of their own (their majority live with parents) and it is not until the 6th year after marriage that their

majority (70 percent) have an independent dwelling. The number of children of couples having an independant flat is only slightly higher than of those who do not have. But the couples who can get a flat later are not so likely to fulfil their original plan about family size: they stop at the first child – even if they wanted two – or at the second at maximum. A fact probably having a still more disadvantageous impact on family increase is that the divorce rate is double in the case of those couples who do not live independently.

Health policy measures

Even though the health policy measures are not expressly related to the demographic policy objectives, the measures expected to promote a more modern family planning or to contribute indirectly to improving the quality of the population are usually discussed in this context.

It is a general experience that the family size is mostly an outcome of the deliberate decision of parents and the level of fertility does not depend on the legislation on the prevention or interruption of pregnancy of any given country. It is another empirical fact that actual completed fertility cannot be influenced in the long run, but only provisionally, by statutory provisions (legalizing, restricting or prohibiting certain methods, mainly induced abortion).

The Hungarian demographic policy adopts the principle that it is the family (the parents) who decide how many children they want to have and when they should be born. However, everything must be done for the possibly riskless prevention of unintended pregnancy. Therefore sanitary education and the medical practice related to birth control do their best that the means of family planning should not be induced abortion but up-to-date and effective contraception methods. This was the purpose also of the 1973 measures which stipulated the conditions of approval of induced abortion and, at the same time, promoted a wider use of modern contraceptives (primarily the oral ones of hormonal effect).

The dual measures have proved to be most effective. The number of induced abortions gradually decreased since 1974: before taking the said measures there was an induced abortion for each live birth (and in 1974 the number of induced abortions was even 40 percent higher than the number of live births); in the last few years there is one induced abortion for every two live births. Simultaneously, the number of females taking oral agents increased: in 1980 already 680 thousand women applied this method of contraception, two and a half times more than in 1973. This means that the ratio of 17 to 49 years old women using oral contraceptives increased from 11 percent to 27 percent.

These results are internationally appreciable. Among the socialist countries Hungary is similar to the GDR with respect to birth control. In Hungary about 60 percent of married women under 40 years of age use modern methods of contraception. This rate is equal to that in the most advanced Western countries (United States, Norway) and is higher than in France and Britain (or Denmark where it is around 50 percent).

The modern means of contraception are much less widespread in Czechoslovakia (only about 30 percent), they are hardly known in Bulgaria and Poland (in the 5 percent range), and are unknown, that is, prohibited by law, in Romania.

With respect to the rate of induced abortions the situation in Hungary is much more favourable than it was in the sixties, when such indicators were the highest in Europe. Induced abortion has been legalized by now in almost every country although in some, including several European socialist countries (Hungary, Bulgaria and Czechoslovakia) the old and totally liberal practice was restricted. In Romania, on the other hand, induced abortion was absolutely prohibited in 1966. Upon amendments of legal provisons the number of induced abortions showed considerable increase in most of the North- and West-European countries whereas in the socialist countries mostly decreases were recorded, although the rate of abortion is usually still higher in the latter ones. But here the Hungarian rate already belongs to the lower ones. In Bulgaria the number of induced abortions is higher than that of live births and in Romania, despite the prohibiting law, it is the same, in Czechoslovakia there are almost 80 abortions per 100 liveborn and this rate is ranging around 60 also in the GDR. This figure is lower than Hungary's (50) only in Poland (about 30).

How can the educational, consciousness-forming power of various provisions of law and subsidies be assessed? In other terms: what can be expected from a complex demographic policy – in general, irrespectively of its instruments, – in what way is it able to change an established demographic situation?

There are several possible answers and the success of the demographic policy is judged in different ways also in the national literature. It is a general opinion that it is extremely difficult to change the settled family ideal of the society (of the families). For example if it is assumed in a given period that the "ideal family" is the family having two children, then society cannot easily change this "ideal" by statutory provisions. It would need complex changes in the way of life, the environment and public "consciousness" to change the "family ideal" having crystallized over tens of years into a, say three-child family size.

It is a far more realistic objective of the demographic policy to help the fulfilment of the families' own family plans. *Therefore the instruments must serve for enabling every married couple to carry out their preliminary ideas.* For example, it must not happen that parents planning to have three children give birth only to one or two or, what is an even more frequent symptom in the Hungarian society, that those wanting two children stop at the first child. This approach becomes the base for a really feasible demographic policy which may later on, as part of a continuous development, also aim at raising the actually planned number of children, or even at changing the generally accepted family ideal and at increasing the family size.

НАРОДОНАСЕЛЕНИЕ, ДЕМОГРАФИЧЕСКАЯ ПОЛИТИКА И ЕЕ СРЕДСТВА В ВЕНГРИИ

А. КЛИНГЕР

В Венгрии относительно демографического положения уже более ста лет имеются достоверные данные. Они показывают, что сокращение смертности и плодовитости началось уже в последней трети прошлого столетия. Сокращение плодовитости — в особенности в период между двумя мировыми войнами — было большем, чем сокращение смертности и поэтому замедлился процесс естественного прироста населения. В начале 1950-х годов, в первую очередь, в связи с мероприятиями, направленными на ограничение прерывания беременности, этот прирост в значительной мере увеличился, однако в последующем, вплоть до начала 1960-х годов рождаемость резко сократилась. В отношении рождаемости можно говорить о взлете и спаде и численность следующих друг за другом поколений в значительной мере колебалась. В начале 1970-х годов плодовитость стабилизировалась на таком низком уровне, который уже не обеспечивал простое воспроизводство населения. Всеобщее распространение получил идеал семьи из двух детей и в отношении реализации этого идеала имелись эффективные противозачаточные средства.

В 1973 г. были введены новые комплексные мероприятия, касающиеся демографической политики. Эксперименты, направленные на принятие семьи в составе трех детей не достигли цели. На протяжении нескольких лет опять увеличилась рождаемость, главным образом, в силу вступления в фертильный возраст больших по численности когорт и в связи с тем, что по времени второй ребенок рождался раньше. В середине 1970-х годов наступил новый взлет рождаемости. С тех пор рождаемость постоянно и в значительной мере сокращается.

В будущем демографическое положение в Венгрии будет характеризоваться неизменно низким уровнем плодовитости и дальнейшим сокращением рождаемости из-за того, что в брак будут вступать и заводить детей меньшие по численности когорты. В связи со старением населения и в самом деле возростающей смертности мужчин и женщин среднего возраста смертность будет возростать. В результате всего этого численность населения, начиная с начала 1980-х годов будет сокращаться и судя по пессимистическим и более реальным оценкам в конце нынешнего тысячелетия численность населения приблизительно на 400 тыс. чел. будет меньше, чем в настоящее время.

Венгерская демографическая политика в основном является пронаталистической, направленной на стимулирование плодовитости. Она стремится к развертыванию такой ситуации в отношении плодовитости, когда обеспечивается простое воспроизводство и когда величина новых поколений не колеблется значительно по отдельным годам. Наиболее важные елементы венгерской демографической политики могут быть сведены в следующие четыре группы:

1. Материальная-денежная помощь, наиболее распространенной формой этого является пособие на семью, а единовременным материальным пособием следует считать пособие по родам. Система пособий на семью в Венгрии характеризуется предоставлением в особенности высоких пособий трехдетным семьям и тем, что после первого ребенка пособие на семью не предоставляется.

2. В отношении временных-материальных льгот следует указать, что в Венгрии продолжительность декретного отпуска составляет 20 недель. Имеются и такие страны, в которых продолжительность этого отпуска зависит от количества детей. Специфическим средством венгерской демографической политики является предоставление пособия по уходу за ребенком, которым трудящиеся женщины могут пользовать до тех пор пока ребенку не исполнится три года. В это время матери получают 25—40 процентов своей среднемесячной заработной платы. Помимо

этого во время беременности и в период воспитания ребенка матерям предоставляются значительные льготы по рабочему времени и выплатам по больничному листку.

3. Из числа натуральных выплат наибольший прогресс достигнут в отношении развития детских учреждений. Не смотря на это детские сады и ясли все еще переполнены. В 1979 г. в ясли было записано 15 процентов детей в возрасте ниже 3 лет, а в детские сады 85 процентов детей соответствующего возраста. Наиболее важным элементом натуральных услуг являются льготы, предоставляемые молодым и многодетным семьям в отношении получения квартир.

4. Из числа мероприятий демографической политики наиболее существенными являются меры по современному регулированию рождаемости. В результате в значительной мере сократилось число абортов и все более широкое распространение получает антиконцепция при использовании современных средств.

От этой демографической политики и имеющихся в настоящее время средств нельзя ожидать быстрых и существенных изменений в демографическом положении страны. Для этого следовало бы изменить сложившийся идеал семьи, однако в этом плане влияние оказывают образ жизни, окружающая среда, общественное сознание.

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THE ACCELERATION OF INFLATION IN THE UNITED STATES IN THE SEVENTIES

In an earlier article written in common with F. Molnár, the authors illustrated some important components of the inflation in the USA in the seventies. But the diagrams used there did not indicate the development of costs and thus hardly provided information about the causes of the acceleration of the inflationary process. The present article wishes to make up for this deficiency to some extent. Taking into account that oligopolistic price formation asserts itself with decisive weight in the US economy, it first points out that in the inflation experienced in the decade investigated it was not mainly excess demand but the rise in costs that played the main role, and then presents a few, probably the most important causes of the rising trend of costs.

In an article [1] written in common with F. *Molnár* we presented some statements which we intended to serve as a preliminary publication of certain results of research, to appear in full in a book of ours under preparation. Our article showed how – by applying a variant of the formula relating to the price level of consumer goods – we analysed and illustrated with a series of diagrams the components of inflationary price movements having taken place in the United States in the seventies. Participants of a debate held in the meantime on the basis of the manuscript of the book in the Institute of Economics, Hungarian Academy of Sciences accepted the analyses relating to the individual years, but missed the causes of the accelerating trend of inflation experienced in the period analysed.

This feeling of the critics was justified. True, inflation is a highly complex phenomenon: the knowledge of the economist about this phenomenon is insufficient to give a complete answer to the question asked that would be satisfactory in every respect. But, reflecting about the matter, I had to realize that our method worked out for the analysis of inflationary phenomena – that proved to be useful for the analysis of individual years, and was presented also in the article quoted – had an inherent weak point which has become an obstacle to our being able to deduce that little we can still state about the causes of the acceleration of inflation. In the present article I wish to make up for this deficiency which was also felt at that time but then, insisting all too much on our method, we dared not attempt its clarification.

The analysis based on the Δp_{II} formula leaves the movements of total cost out of account

In what does then the deficiency of our method setting out from the Δp_{II} formula consist? We used to write this formula in the form in which the price of a unit volume of product is the dependent variable and we get it as a quotient of two independent variables, the amount of money spent by workers on consumption as nominal demand and the volume of consumer goods left over for them as real supply. But, in itself, this formula merely expresses a tautology, thus it remains valid also if not the price of a unit volume of product, that is, not the price level is considered as the dependent variable. About the diagrams illustrating the interrelations comprised by the formula we already wrote in our 1978 article that: ". . . taking the change in the price level as given, we might say that our diagrams show the change in the volume of consumer goods sold rendered possible by the quantities figuring in the numerator of the formula." [2] In this approach, therefore, the amount of money spent by workers and the price level are the independent variables and the volume sold is the dependent one. In the text of our book we characterized our diagrams by saying that they illustrate how three variables – namely the nominal demand raised by workers, the realized supply of wage goods expressed in terms of volume and the price level – adjust to each other.

From the three interpretations just quoted the last one is the most precise. But also the two former ones have their particular fields of validity. To wit: if we think that – of course, within the limits of possible deviations from the exact assertion of the law of value – the price level at any time depends on the relative proportions of demand and supply, then we are arguing, as a matter of fact, in the framework of the price model prevailing under the conditions of the classical free competition. But if we recognize that prices obey the rules of monopolistic or, more correctly, of oligopolistic price formation, a much more correct interpretation of the diagrams will be that the volume of consumer goods sold to workers depends on the prices calculated by the oligopolies and the amounts of money spent by workers on purchases.

Of course, our diagrams may be interpreted also in this manner. But they comprise in detail only the sources of the amount of money spent by workers on purchases, while both the volume of commodities sold to workers and the price level appear merely as empirical data. If we could somehow read from the diagram how the oligopolistic price level is formed, then the volume of commodities proved saleable would not be a "mere" given figure, but precisely the data sought and interpreted by the diagram. But we do not learn anything about the practice of oligopolistic price formation from the diagram. And this does not derive from mere oversight.

The price set by the oligopoly is the sum of the expected cost and the calculated profit margin

Let us establish above all: non-oligopolistic branches of business may also be found in the United States. Presumably, however, even the bulk of their products reaches the final users through the distribution network of the oligopolies. And if, under the rule of oligopolies, prices are higher than they would be under the conditions of free competition, then this statement holds not only for the products of the oligopolies: but also the product prices of enterprises belonging to the competitive sector can be higher if the oligopolies fighting for the market hold their prices high. We hardly commit any serious error if we now try to analyse the inflation of the seventies by reasoning in terms of the model of oligopolistic price formation. As a matter of fact, the oligopolies set their prices in a relatively autonomous manner: on the basis of estimated costs and their calculated profit margin. It is precisely the profit margin that is set by the oligopolies themselves – true, between certain margins of error.

The price of a unit of product is the sum of the cost and the profit margin, and the change in price the sum of changes in these two components. However, in our Δp_{II} formula neither cost, nor the profit margin appear, nor do they in our diagrams. Thus we have to draw into the scope of consideration also other data in addition to those already investigated.

The statement that the oligopolistic branches can on the whole regulate their profit margin means more exactly that in these industries we generally find a leading enterprise which initiates the change in price at any time. To the cost hardly known exactly in advance but at any rate estimated it adds some calculated sum of profit and determines the price on this basis, while the others follow it in respect of prices. (This does not mean that the profit margin will be the same in the other firms as in the one initiating the price change, that is, the price leader.) But the cost level can only be influenced very slightly by the initiator of the price change or by the other members of the oligopolistic group. They can do so only insofar as they can save living or embodied labour (apart from the case when they can obtain materials or labour exceptionally cheaply).

But the price level of the cost elements is not independent from the fact that the price system of the country is decisively influenced by the great weight of the oligopolies.

As regards the level of wages: even a firm in oligopolistic situation cannot freely decide on how high to set the wage rate of its workers. It is not only the trade unions that can actively interfere, but, even disregarding this, every enterprise has to keep pace in regard of wage level with the other enterprises and industries, otherwise its workers would leave these firms. But, in lack of particular prohibitive causes the ensemble of oligopolies is not compelled to exert some major resistance to the wage demands of the trade unions, since, in general, they can shift the high wage costs onto purchasers in their prices. Also materials and services are produced by labour, thus, in the final analysis – if they are of domestic origin – their costs, too, can be reduced to domestic labour costs, and also their increment can be shifted. (As much is true, that the rise in raw mate-

rial prices appears in the rise of product prices usually with a time lag.) This turning of cost rises into price rises is made possible on the one hand by the fact that wages are costs merely for the firm, while they are income for those receiving them, and their bulk will be soon turned into effective demand. (The financial activity of the state only makes this interrelation more complicated, but does not change the substance of the matter.) On the other hand, however, the possibility of shifting costs onto prices becomes a fact only because the oligopolies regulate also the volume of output, the effective supply of their products, and thus they rather successfully prevent the accumulation of unwanted unsaleable stocks brought about by prices set by them too high. In other words: the oligopolistic group can well adjust its own supply to the global effective demand corresponding to the price level regulated on the basis of oligopolistic principles, while the individual firm makes efforts to increase the demand for its own products by advertising, product differentiation, additional services and the like. Thus, in this system the cost level is prone to rise and it does rise – indeed – in our days. But the situation is different with the profit margin, the other determinant of the price level. Its closer examination deserves a not too long line of reasoning.

A. S. Eichner's theory of the profit margin and its critique

Alfred S. *Eichner,* a leading personality of "post-Keynesian economics", this today perhaps most progressive non-Marxist economic school, is of the opinion that he succeeded in finding a unique answer, unique in the mathematical sense, to the question what size of profit margin the oligopolies calculate with. One of the important elements of his argumentation is the statement that demand for the commodities of a typical oligopoly reacts on price changes sufficiently inelastically for the enterprise (or group of enterprises) to be able to raise its profit margin in a manner that also its total profit should increase. [3] With this theorem Eichner wishes to support the idea that oligopolies are more or less free to determine their total profit and thus to raise total profit by setting a higher profit margin – though restricted by the danger of outsiders' stepping in and of government interference. (Eichner expounds these ideas in a terminology different from ours.) But this can only be true in the case of micro-level changes. The price of products for which demand is inelastic can be raised also without a considerable fall in demand for them. Or: demand for certain products might grow relative to others so that more can be sold of them without a reduction of the profit margin comprised in them. And in connection with the purchase of houses and certain consumers' durables it is particularly true that the volume of sales depends not so much on prices as on the availability of credit. Nevertheless, raising the price of articles with inelastic demand generally deflects demand from other products. In fact, in our 1979 article we also showed, under the subtitle: "The paradoxical relationship between profit margin and profit volume" that – with the exception of special transitional cases – the real profit of

producers turning out consumer goods does not grow but even diminishes if each of them raises the profit margin.

I cannot go here into the details of Eichner's reasoning about the determination of the profit margin which he expounds on more than 200 pages. Highly simplified and put in our own terminology I can say as much about his concept: The oligopolies set the profit margin so high – and not higher – as to be able to implement from the own assets originating in the profits thus earned so much investment – after satisfying their shareholders – as they deem justified in the period for which they have drawn up their plans.

Eichner reached this conclusion through the observation of a few oligopolistic groups. It is also true that the firms spend the bulk of their undistributed profits sooner or later indeed on investment, although as far as I know – and with good reason – with a not negligible part of profit they increase their liquid reserves, their portfolio. Nor is it clear that if a greater profit margin indeed involved a higher amount of profit, why should the investment propensity be a more objective determinant of profit earning efforts for the oligopoly than the size of its attainable future profit is of its intention about the size of investment to be carried out through self-financing. This is particularly not clear if we reflect that a growing number of enterprises extend their activities to new fields and that this expansion of the scope of activities is investment-intensive.

But, however it is, as much is clear that though those who plan prices and investment certainly have some *ex ante* idea how much their total profit will be with a given profit margin, it would bear testimony to unlikely great naivity if they were sure in the realization of their target. As a matter of fact, although the oligopolies are calculating in terms of the profit margin when setting the price level, actually they do not set the profit margin, but the price level; and nobody can exactly know the profit margin beforehand. Namely, the future cost falling on a unit of product is always uncertain. Not only the future wage rate and the price level of raw materials can cause surprise, but the cost also depends on the development of overhead costs per unit of product and the latter also on the, for the time being uncertain, volume of the actually saleable products. The enterprise could not know this volume of products beforehand even if it could well estimate how the change in price level would modify, *ceteris paribus,* the volume of sales. The volume of sales does not conform to *ceteris paribus* assumptions, but also depends on the development of demand, thus, among other things, on the size of government revenues and outlays, on the balance of trade, on the savings or overspending of wage earners – and not only on these. And conversely, from the actual, observable, *ex post* profit margin it does not turn out exactly how high it was planned, and much less what sum of profit was hoped for with this profit margin.

Further, it is a fact that in reality the correlation between investment and the business cycle is positive, in spite of the fact that nowadays the change in investment follows the changes in business with a time lag. Higher investment, *ceteris paribus,* raises profit and thus improves business, and less investment, *ceteris paribus,* impairs it.

Table 1
The profit margin at GNP level, 1968–1978
(In percentage of the price receipts of the business sector, less indirect taxes)

Profit margin	Year										
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978
Net after taxes	16.8	15.4	14.2	14.4	14.8	14.9	12.0	12.4	12.8	13.3	13.2
Gross after taxes	26.2	25.2	24.7	25.0	25.0	25.0	22.9	24.5	24.7	24.8	24.4

I insert at this place a table – modified relative to the one published in the 1979 article – on the net profit margin after taxes. (see *Table 1*)

The figures show that the profit margin was higher when business was good, than when it was bad. What should we then believe? Did the profit margin decline at times of bad business because enterprises wished to moderate their investment to be implemented within their own planning horizon, or was it the slack business itself and the slackening of the growth of nominal demand accompanying it that prompted them to hold back their prices somewhat, to put up – intentionally, or under duress – with a lower margin of profit? In my opinion this latter one is the more relevant explanation. Excessive accumulation of inventories, the growing weight of fixed costs involved by the withholding of production are costly matters. Also an enterprise in oligopolistic position has to make efforts to produce with a possible good utilization of capacities and that its share in total turnover (that is not only in the turnover of the kinds of products marketed by it) should not diminish. Thus, a firm in oligopolistic position will twice reflect whether to further raise its prices if it finds that its realized profit margin is smaller than the planned one. It seems, we can draw the conclusion: although oligopolies can directly influence the price level through planning the profit margin, the real size of the profit margin does not depend on their investment intentions, but above all on that of demand and supply, inclusive, naturally, of the supply of imported goods, and import competition.

From the diagrams of Δp_{II} published in the 1979 article the direct causes determining the changes in nominal demand in some year could be fairly well read. From a comparison of price changes with the development of the profit margin we can also conclude on costs – at least on GNP level. It turns out from the diagrams that the relative weight of the factors whose combined effect decides how nominal demand, the price level and the volume of products sold adjust to each other was different in each year and their ensemble affected or allowed prices to rise differently in each year. Thus, the factors that might be considered random ones from the aspect of the theory of inflation – whose general theory is still to be born – had a considerable role. It is, however, also

indisputable that the average price rise in the seventies essentially exceeded the one experienced in the sixties. Also it is a fact, that in the decade examined both economic politicians and the public were much more worried by inflation than in the preceding one.

But even that must not be exaggerated. It also turns out from our diagrams that inflation did not accelerate evenly at all in the decade examined. Thus e.g. the annual rate of price rise Δp_{II} exceeded 4.5 per cent already in 1970, while it only moved even in 1976 around 5 per cent and in 1972 it merely attained 4. Nevertheless: particularly in the second half of the decade we not only see irregular fluctuations, but find a definitely accelerating trend, and the reason or reasons of this tendency are hardly explained satisfactorily by our diagrams.

It may be assumed that several non-recurrent events, to be considered random from the aspect of the general theory, had a role in the acceleration of inflation, but we can hardly rest satisfied with that much. Unfortunately, I cannot – and nobody can – exhaustively list the *lasting* impacts which had to lead necessarily, thus not by chance, to these changes, but I can tell something about them.

The changes in the profit margin, demand and the price index indicate a cost-push inflation

First of all, I begin with a negative statement. Inflation did not accelerate because the oligopolies and the monopolies raised prices by an excessively big profit margin above costs. From *Table 1* it turns out that the profit margin (at the level of GNP) was highest – in the period investigated – precisely at the end of the sixties, in 1968 and 1969; and it has not attained that level ever since. The profit margin was smallest precisely at the time of the highest price rise, in 1974 and 1975. It somewhat rose in 1976, that is, precisely when the lowest rise in price level was experienced in the second half of the seventies. Next the rise in price level again accelerated, while the profit margin on the whole stagnated (the net profit margin somewhat increased, but the gross one fell a little). As much is clear that when the profit margin diminishes, the rise in prices lags behind the rise in costs. In connection with this last sentence of ours the problem arises: should we consider the acceleration of inflation that occurred as a cost-push, or as a demand-pull phenomenon? We obviously cannot give an answer of the nature "either the one or the other". It is namely clear to us that what is additional cost for one agent of the economy, is an additional revenue for the other, which is potentially a source of additional demand. This holds particularly for wage costs, since those living on wages always spend the bulk of their wages, that is, they raise demand with them.

Well, a not negligible part of wages are not paid by the enterprises. Potentially, however, every wage can turn into demand. And as regards consumer goods, the overwhelming part of demand for them derives precisely from wages. Thus the question arises: whether we can find a regular parallel between the demand-raising impact of

Table 2
Demand-raising effect of wage incomes and the rise in price level
(percentual change relative to total demand and relative to the price level in the preceding year)

	Year									
	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978
Impact of wages	11.5	8.1	8.1	11.5	13.5	11.5	7.6	13.1	13.0	14.3
Rise in price level	4.6	4.6	4.6	3.9	5.9	10.4	8.4	8.4	5.7	6.8

additional wages spent on consumer goods and the extent of changes in the price level of consumer goods.

Table 2 comprises the answer.

Looking at the figures it first strikes the eye that wages paid raised demand, in every year without exception, by a higher percentage than the percentual rise in price (of course, demand was modified by transfers and savings). If we rendered account only of a tendency, there would be nothing surprising in that, since, *ceteris paribus,* an increase in wages does not raise prices if the productivity of labour grows at the same rate. But it is somewhat surprising that the phenomenon in question was experienced every year, although the productivity of labour did not develop at all satisfactorily every year.

But we have also seen that the price raising effect of wages moved parallel to Δp_{II} in only four years, more exactly, in 1971 both remained on the level of the preceding year, in 1973 and 1978 both increased and in 1975 both diminished. In 1970, however, the percentual price-increasing effect of wage incomes fell, while Δp_{II} remained at the earlier rate. In further four years they moved in opposite direction to each other relative to the preceding year, in 1972 and 1976 the wage impact increased, but Δp_{II} diminished. But when inflation was the most rapid, that is in 1974, the price-raising effect of wages exceeded that of 1972, when inflation was the lowest, merely by one tenth of a percent. In 1977 inflation was again faster than in 1976, while, at the same time, the wage-effect fell back by one tenth of a percent.

Of course, the total wage paid is not the only determinant of the total demand raised by workers, since demand is increased by transfer payments and overspending, while it is diminished by taxes levied on workers and by their savings. The percentual increase of the nominal total demand of workers relative to the preceding year is shown by the numerator of the Δp_{II} formula. This has to be confronted with the development of inflation.

Instead of a table, the interrelations are presented with the aid of a diagram in Figure 1.

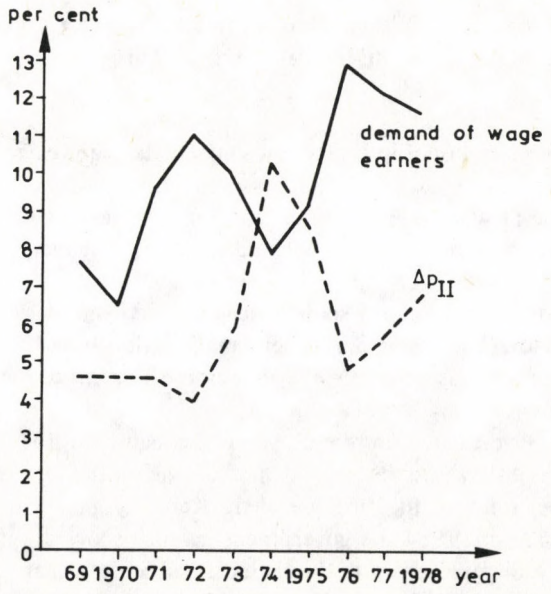

Fig. 1. Annual changes in the demand of wage earners and in the Δp_{II}, *1969–1978, per cent*

The picture is astonishing. It can be well seen that the curve indicating the percentual change in the nominal demand of workers relative to the preceding year made rather capricious jumps in 1970 and 1971, while the curve of the rate of inflation remained level. But beginning with 1972 the two curves moved in opposite direction in each year: the price rise accelerated relative to the preceding year when the percentual change in the effect of workers' total demand abated; and inflation abated when the percentual change in nominal demand exerted a relatively greater effect.

I am of the opinion that this fact provides us with a rather solid argument to establish that the inflation of the seventies must not be declared to be a mainly demand-pull inflation.

But something else can also be seen: as regards the trend, not only inflation accelerated, but also the price raising effect of the demand by workers strengthened. That is, growing demand, naturally, contributed to inflation. As a matter of fact, inflation not influenced by both sides – demand and costs, pulled by the one and pushed by the other – is hardly possible. The only question is whether it can be established which side had a decisive influence. There is every indication that in the years examined it was the cost side.

A few paragraphs earlier it was stated that if the profit margin diminishes, prices will lag behind the rise in costs. Let us reverse this statement and we arrive at the following, similarly correct, one: a diminishing profit margin coupled with rising prices indicates costs growing faster than prices. Well, in the seventies the profit margin

never attained the 1968 or 1969 level. Thus, in this decade costs increased more rapidly relative to prices than they did in the late sixties. This was also one of the lasting phenomena.

Acceleration of inflation and some of its major causes

Let us examine at what point in time inflation had began to accelerate. The price level of the consumer basket of urban wage and salary earners increased e.g. as shown in [4] p. 314

As can be seen, the price index somewhat increased beginning with 1962, but until 1962 it remained below 2 per cent p.a. After that inflation began to accelerate. (In the last year of the decade it was already somewhat faster in terms of the consumer price index than indicated by the Δp_{II} formula.)

We have not investigated in detail what the cause or the main cause of the acceleration of inflation was in the second half of the sixties. It has to be taken into account e.g. that beginning with 1961 president Kennedy pursued an expansive fiscal policy: in 1961, 1962, and 1964 the government balance showed a deficit, while – and also because of it – full employment in the then official sense was attained by 1965 (with a 4.5 per cent rate of unemployment). Between 1961 and 1964 government expenditure increased at an annual average of 5.1 per cent – and this substantially exceeded the rate of inflation. Between 1965 and 1969 the average annual increase of the government deficit was already 8 per cent and even that was faster than the rate of the already accelerating inflation. In vain did in 1966 and 1967 president Johnson propose to the Congress to raise the tax rates. This is how the at that time postwar record deficit of 14.2 billion dollars was attained. But it also turned out that the "full" employment of 1965 was not so full: the unemployment rate continued to decline and reached by 1969 a trough at 3.5 per cent. Of course, also the Viet Nam war contributed to this success.

An increase in government expediture not covered from wage taxes is a factor that increases inflation from the side of *demand.* An increase of wage tax, however, if not accompanied by a corresponding reduction of after-tax wages, stimulates inflation from the side of costs, since gross (pre-tax) wages have to be paid by the enterprise. But, under conditions of full and even over-tense employment, a reduction of the after-tax wage level is quite unlikely.

Table 3
Rise in the consumer price index over the preceding year
(per cent)

	Year										
	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
Consumer price index	1.6	1.0	1.1	1.2	1.3	1.7	2.9	2.9	4.2	5.4	5.9

With the last said I only wanted to emphasize, with some explanations added, that inflation accelerated already with the mid-sixties. This is an important fact for understanding later events.

Namely, one of the chief reasons of a lasting and accelerating inflation is the consolidation of inflationary expectations or, if you like, inflation itself.

In the first half of the sixties, under conditions of increasing employment and rising real wages, workers did not much feel a rate of inflation below 2 per cent p.a. However, as soon as the rise in prices accelerated and turned out to be a lasting phenomenon, workers started a strong counter-offensive in order to preserve their share from the national income. Similarly to the price leaders among oligopolies, among the representatives of workers, the trade unions, there also are mighty ones which lead the fight for higher wages. Collective agreements became ever more frequent in which not only the expected rate of increase of productivity but also the expected rate of inflations was "discounted". The trade unions are facing the oligopolies and, as has been emphasized, the keeping of wages at the possible lowest level does not occupy the first place on the scale of preferences of the oligopolies, they rather shift the costs further onto users. (In some phases of his attempt at regulating prices, Nixon found it necessary that the wage rise itself should be regulated by the government.) From this reasoning as much can be already seen that the wage rise attained under inflationary circumstances works at least towards maintaining the earlier rate of inflation – as regards its impact on demand and costs. But, in all probability, more is true than that. We also know from Hungarian experience that once wages rise wherever productivity increases, then, in order to avoid unbearable disproportions and the strong migration of labour, wages have to be raised even where productivity did not grow, thus e.g. also in unproductive jobs. (The disproportionate rise in the price level of certain services is chronic.) This already works towards increasing inflation. So much about wages in connection with inflationary expectations.

The other aspect is related to the price policy of the oligopolies. We have seen that the profit margin did not grow in the wake of inflation. But when the oligopoly sets its prices for the following period, it adds this unchanged profit margin to the future costs calculated according to the expected rate of inflation. Of course, this too works towards making the inflationary process steady, it is itself an accelerating factor during an accelerating inflation.

The cost per unit of product is, of course – *ceteris paribus* – reduced by increase in the productivity of labour. But in the seventies the productivity of labour developed unfavourably. (Between 1968 and 1978 it rose on annual average by only 1.6 per cent, between 1973 and 1978 by a mere 1 per cent and even a fall in productivity occurred in some years, while the long-term average had been 2–2.2 per cent p.a.) Of course, this, too stimulated inflation from the side of costs. Nor did investment develop satisfactorily. It is likely that with slack investment activity the productivity of labour could not rise adequately. But most Western authors link also the slackening of investment activity to inflation itself. They usually argue that in consequence of inflation firms become uncertain in their calculations and are afraid of unforeseeable government interventions.

It seems to me that it is precisely the fact of inflation that renders a certain kind of calculation rather secure. If a fixed asset is sorted out – let us assume – after five years, under normal conditions the enterprises have to save the costs of the future replacement out of their gross profit in five years. On the other hand, if the annual rate of inflation were 5 per cent, in five years they would have to pay almost 28 per cent more for the new equipment replacing the old one. But the present rate of inflation is higher than 5 per cent and the permitted rate of depreciation would not cover the replacement. (It is regulated, namely, by law what percentage of the procurement price can be written off as depreciation. The amount above is taxed as profit.) This fact itself seems to justify the reluctant behaviour of enterprises. It is highly questionable whether, if enterprises invest the accumulated replacement fund into securities, the interest received will make up for the losses on account of price rises. If there were no inflation, the attainable – say 5 per cent – interest would be a "net gain" altogether.

Further: in the sixties the USA enriched itself through the exaggeratedly overvalued dollar at the expense of the whole world. This came to an end in the early seventies when the dollar became continually and considerably devalued. In this period the USA imported a significantly smaller volume of commodities for the same amount of dollars. If the more expensive imported commodity is further processed, this considerably increases costs relative to the earlier ones, while the additional revenue corresponding to the additional costs is enjoyed by foreign countries.

This problem became particularly acute on account of the oil price explosion and the parallel rise in the price of some other imported materials, though the latter was of a smaller extent. True, immediately after the oil price explosion the direct rise caused in prices was estimated only at about 2–3 percentage points. But in the period investigated by us the average annual price rise was 6 per cent, while between 1965 and 1969 this had been only 3.4 per cent. The difference is 2.6 percentage points, while the oil prices continued to rise steeply also since the price explosion.

To recapitulate: acceleration of inflation already started in the second half of the sixties – thus the inflationary expectations became firmer, and found expression in the demand for higher wages. The oligopolies did not offer firm resistance to demands for wages, thus wages also increased where productivity stagnated; with the slackening investment activity, among others because of inflation, also the productivity of labour had to decline. Devaluation of the dollar increased costs through the more expensive imports; the oil price explosion significantly contributed to accelerating the process. All the factors listed increased costs – though partly only in relative terms – while the monopolies discounted the expected increase in costs when setting their prices. Perhaps this certainly incomplete list – comprising also many commonplaces – is sufficient for not to leave us perplexed and helpless experiencing the acceleration of inflation.

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УСКОРЕНИЕ ИНФЛЯЦИИ В СОЕДИНЕННЫХ ШТАТАХ В 1970-ЫХ ГОДАХ

П. ЭРДЕШ

Автор и Ференц Молнар в своей статье, опубликованной раньше, на диаграммах представили некоторые существенные черты американской инфляции 70-ых годов. Эти диаграммы, однако, главным образом из-за того, что — по методологическим проблемам — ими не затрагивалось формирование издержек, давали лишь несущественную информацию о причинах ускорения инфляционного процесса. В данной статье в определенной степени восполняется этот пробел. Автор, исходя из специфики олигополистического ценообразования, предположительно преобладающего в хозяйстве США, выявляет, что в наблюдавшейся за последнее десятилетие инфляции главная роль принадлежала не чрезмерному спросу, а повышению издержек, а затем указывает на некоторые, вероятно, важнейшие причины наблюдающейся тенденции роста издержек.

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B. KÁDÁR

ADJUSTMENT PROBLEMS, PATTERNS AND POLICIES IN SMALL COUNTRIES

The article examines how the development of small West-European countries, forced to rely on the motive powers of the international division of labour, was affected by the new slower growth of the world economy beginning in the seventies but which seems to be lasting. Deterioration of the external conditions of economic growth had, in general, an unfavourable influence on the growth performance of the small countries between 1973–1978 but the development strategic answers given to the world-economic challenges promote the emergence of an adjustment process in most small countries in an offensive sense.

Introductory considerations

For a long time theoretical economics did not pay particular attention to interrelations between the dimensions of national economies and economic development, to consequences of the economic size of nations, to the distinctive features of small countries and international economic powers, their relative advantages and disadvantages nor to the economic policy means, instruments and organizational forms suitable to compensate for eventual disadvantages arising from the small economic dimensions of the respective countries. The majority of the papers presented to the Lisbon conference of the International Economic Association in 1957 did not yet find the problems stemming from the different economic dimensions of national economies relevant.

The economic aspects of the small-countries' problems were brought into the limelight by the emergence of the scientific-technical revolution, the increase in the dimensions of economic activities, the growing concentration of capital and production as well as the expansion of transnational enterprises. In the sixties the works of *Balassa* [1], *Chenery* [2], *Kuznets* [3], *Michael* [4] relying on wide statistical bases analysed the interrelations among per-capita national income, economic structures, external vulnerability and economic dimensions. In the Hungarian professional literature I emphasized [5] that among the factors determining the size of the nations it was not the geographic but the economic dimension that had a relevant role in our age. *Ceteris paribus,* less favourable natural and geographic endowment, a narrower domestic market, more limited economies of scale and internal accumulation capacity of small-sized countries require a development strategy differing from that of the big economies. Optimum criteria of a development strategy in small countries require external orientation, intensive participation in the international division of labour, specialization compatible with the limited economic dimensions, and the development of an institutional system facilitating economic open-

ness but diminishing the risks of political and economic vulnerability of an open economy.

Experiences of the three decades following the end of World War II supplied adequate evidence about the increasing role of the international division of labour in economic growth. During the hitherto most dynamic phase (1950–73) of international economic development small countries – in contrast with the pattern of the first half of this century – demonstrated their increasing vitality and economic viability, their rate of economic growth was fast, identical with that of the big countries, their equilibrium conditions were generally favourable, and their role in international trade increased. At the same time, the first symptoms of a lagging-behind already started to emerge in the sectors and subsectors representing the vanguard of international structural-technical progress. Similarly, increasing and higher than average incremental capital-output ratios became manifest in most small countries.

It is not unjustified to raise the issue, how the recent development of the small countries obliged to rely on the international division of labour has been affected by the new, long-term phase of international economic development accompanied by new conditions, lower growth rates, bigger and more frequent shocks, and market fluctuations. This subject can be illustrated more conveniently through the experiences of West European small countries, since there the specific economic problems connected with relatively small economic dimensions appear in a "purer" form. In the small developing countries the heritage of secular backwardness can be considered as the most fundamental socio-economic problem, from which economic size can hardly be separated. During the three decades of their development growth energies of the societies in CMEA small countries were channeled first to building up new production relations and institutional structures. Phenomena and problems of economic growth are primarily of institutional character and offer a less favourable analytical ground to illustrate the interrelations of economic dimensions, growth patterns and adjustment strategies.

World economic challenges in the seventies

The political and economic processes emerging in the last decade represent a new challenge from many aspects for small countries. Unfavourable changes in the development patterns of small countries sensitive to trade can be characterized most comprehensively by lower *growth rates* of international production and trade. The volume of world production increased on yearly average by 6 per cent between 1960–73 and 3.5 per cent between 1974–80. For the small countries realising a decisive or considerable part of their national income through exports of goods and services it is even more important that the volume of world trade increased only by 4.2 per cent between 1974–80 as compared to the yearly average of 8.6 per cent in the period between 1960–73 [6]. Although the international division of labour remained a driving force of economic growth and the dynamism of international trade is greater than that of world production, a decrease in

the elasticity coefficient of international trade from 1.4 to 1.2 during the seventies illustrates the changes in the international economic environment unfavourable for small trade-sensitive countries.

A lower international economic dynamism apart, shifts in relative *prices* represented an additional unfavourable change for the West European small countries. Consequences of the explosion in oil prices affected the small countries dependent on raw material and fuel imports very seriously. At the same time light-industrial goods, semi-products and consumer durables represent a higher share in their exports than in the average of the OECD countries. The relative prices of these product categories have been unfavourably affected by a slow increase in consumers' demand or purchasing power as well as by the international structural oversupply connected also with the increasingly export-oriented industrialization of a number of developing countries. As a consequence of these processes the terms of trade deteriorated between 1973–80 by more than 25 per cent for Spain, Greece, Portugal, and Ireland, by 15 per cent for Denmark, by 11 per cent for Belgium, by 7 per cent for the Netherlands, Austria, Sweden and Switzerland and by 3 per cent for Finland. At the same time the terms of trade deteriorated on West European average by less than 6 per cent, within that the terms of trade for France deteriorated by not more than 2 per cent and those for the Federal Republic of Germany remained basically unchanged.

Owing to the lower international trade dynamism as well as the changes in relative prices the product pattern of international trade measured at current prices has been transformed considerably. The share of fuels in international trade increased from 9 per cent to 25 per cent between 1970 and 1980, absorbing a rapidly increased part of the international import capacities and limiting in an indirect way the import markets for many export products of the small countries. Many small countries had to face a new problem stemming from a doubled relative market share of the developing countries on the markets of less sophisticated industrial products. This problem affects the patterns of industrialization and foreign trade in small countries poorly endowed with natural resources in a broader range. Industrialization and the industrial division of labour in West European small countries has been traditionally based, to an extent much larger than in big economic powers, on the vertical processing and exports of imported primary products [7]. The industrial strategy of an increasingly vertical processing of primary products in many new industrial exporter countries not only intensifies competition in many market sectors but creates frequently new supply constraints and affects considerably the profitability of an industrialization based on the processing of imported raw materials, at least in the product categories representing a lower or medium technological and quality standard.

A new situation has been created by a gradual *geographic shift* in the international economic dynamism towards the overseas areas. During the third quarter of this century the overall economic and particularly the trade dynamism of the European continent exceeded the world average. In the seventies, however, the international economic importance and dynamism of the Pacific Area, the North and South American continents as well as of the Middle-Eastern OPEC countries has not ceased to increase. A lower

economic dynamism in the European area is in itself an unfavourable phenomenon for the European countries developing an intensive division of labour with their neighbours. An intensive cooperation with geographically and environmentally remote areas represents additional difficulties for small countries which (former colonial powers apart) had traditionally weaker market positions on the overseas markets than big powers owing to their limited financial resources, organizational dimensions and long-distance manoeuvring capacities.

Development conditions of small countries and organizations are increasingly affected by a growing importance of *organizational* power in economic processes. The price explosion of 1973 notified the world with a time-lag about the increasing economy-shaping role of power and politics in international relations, a role evolving for many years in the domestic economic life of a number of countries. In the period 1950–78 the share of government consumption in GDP increased in the average of the OECD countries from 12 per cent to 25 per cent. In consequence of a growing budgetary centralization of national income economic conditions for individual sectors, activities, population groups, profitability, price and cost relations, consumption patterns have been increasingly shaped by organizational power, the relative bargaining power of government institutions, trade unions, enterprises, political parties, regional and ethnic groups. The impact of this process has been particularly completed by the increasing importance for growth of the international division of labour illustrated also by a rise from 10 per cent to 18 per cent (1950–80) in the proportion of world exports to world GDP. A widening direct economic basis of the state power and the increased foreign-trade sensitivity of most national economies contributed from two sides to an "international economic environment" where prices and terms of trade do not reflect simply impersonal market relations but the organizational power of the suppliers and buyers, the relative international bargaining power of the national economies. Such changes are, naturally, far from being advantageous for small countries. Similar problems emerge in the microspheres, too. Expansion of the transnational enterprises from the early sixties, particularly on the markets of R and D-intensive products tend to sharpen conflicts between the giant transnational enterprises and the small countries, raise problems connected with the unequal bargaining power in relations between the giant corporations and the mostly smaller enterprises of small countries.

In several West European small countries, mostly in the Scandinavian and Benelux countries special adjustment problems are generated by some sharpening incompatibilities of the present *institutional* and *goal system* with the new external challenges. As a consequence of cultural heritage, missing power aspirations and a wider and more easily created social consensus these countries developed relatively sooner and more extensively the institutional as well as the goal system of the welfare state subordinating quite often and considerably economic policy to social goals. Legislation and economic practice derivering from – using J. *Kornai*'s expression – the "soft budget contraints" of these countries facilitate more the survival of some less competitive excess capacities, create

obstacles to a quick adjustment to the new world pattern and sharper market competition, and do not promote the fight against economic and social resistance to structural adaptation, and make it difficult that the differentiating effect of socio-economic incentives demanded by accelerated adjustment should be accepted.

Adjustment pattern and performances

World economic changes in the seventies inspired and strengthened in Hungary and in many other countries some views emphasizing that an active presence on the world markets dominated by monopolistic impacts and anarchistic fluctuations leads to permanent economic losses, crisis situations in the externally vulnerable small countries. It will be worth our while to investigate how far these views are supported by some indicators reflecting the growth performance of the small countries during the last decade.

During the period of 1968–73 the dynamics of long-term economic growth were more favourable in the average of the five leading OECD countries (USA, Japan, FRG, France, UK) than in the twelve small West-European economies (4 per cent p.a. for the big countries and 3.5 per cent p.a. in the smaller ones). In the period 1973–79 the volume of the GDP increased by 2.5 per cent in small countries as compared to 2.8 per cent in the big economies on yearly average. It would not be justified to explain this difference, not too considerable but rather permanent, in economic dynamism by consequences of economic size. Different endowment with growth factors, differences in the institutional system, a different intensity of the driving forces aimed at elimination of a relative technical backwardness were reflected considerably in the dynamics of economic growth. One can find in both country groups considerable deviations in both directions (UK, Switzerland, South-European countries).

When qualifying a new type of growth process emerging in the last decade one has to consider, however, that growth dynamics is becoming a less relevant parameter. The general growth performance of countries is increasingly characterized by the input-output ratios, input minimization, expediency and speed of the structural adjustment rather than by rates of increase in the volume of output. Recent growth phenomena have supplied plenty of evidence that in a sharpened international competition goods produced and exported in a structure not adjusted to external changes are subsequently, sometimes drastically devalued by the world market. Any lagging behind in adjustment to international changes leads to deteriorations in terms of trade, to income losses. Under these circumstances the dynamics of the volume of production and the disposable national income respectively, can strongly differ.

Nor is it immaterial that *unemployment* influencing quite considerably the socio-psychological atmosphere and the manoeuvring-ground of economic policy tends to be less in the small countries (e.g. in 1980 0.2 per cent in Switzerland, 1.3 per cent in Norway, 2–2 per cent in Sweden and Austria, 4.6 per cent in Finland, 5.4 per cent in the Netherlands, 6.3 per cent in Denmark, 9.4 per cent in Belgium, 9.7 per cent in Ireland).

On the other hand, *inflationary* processes during 1973–80 were more forceful – Switzerland and Austria apart – than in large countries owing to a more intensive social determination of economic policies as well as a higher sensitivity to price inflation stemming from the sphere of international economic relations. (see *Table 1*)

The specific *capital intensity* of the growth process is not an irrelevant factor either, and it showed an unfavourable trend in small countries. During the seventies the share of investment in GDP decreased in the group of the OECD countries (USA, Norway, Ireland apart) owing to changes in international trends or in the domestic political or economic atmosphere. As compared to the average of 1968–72 the share of investment in the GDP decreased by 1978–79 from 25.5% to 21.9% in the five big OECD countries and from 24.3% to 22.9% in small economies. The incremental capital-output ratio for small countries amounted to 5.1 in the average of the period 1950–1973 and to 9.1 in the average of 1978–79 as compared to a coefficient of 7.8 characterizing the big countries.

Table 1
Indices of consumers' prices
(1973 = 100)

	1974	1975	1976	1977	1978	1979
USA	111.0	121.2	128.1	136.5	146.8	163.6
Japan	124.2	139.0	151.9	164.2	170.5	176.6
FRG	107.0	113.4	118.2	122.6	125.9	131.1
Great Britain	115.9	144.3	167.9	194.5	210.6	238.9
France	113.7	127.1	138.9	152.4	166.2	184.1
Average of the big countries	114.4	129.0	140.4	154.0	164.0	178.9
Sweden	109.9	120.7	133.1	148.2	163.0	174.8
Norway	109.4	122.1	133.3	145.4	157.2	164.8
Finland	117.4	138.3	158.2	178.1	191.6	205.7
Denmark	115.2	126.4	137.7	153.0	168.4	184.6
Belgium and Luxemburg	112.7	127.0	138.7	148.5	155.1	162.1
The Netherlands	109.7	120.8	131.5	140.3	145.9	152.2
Austria	109.5	118.8	127.5	134.5	139.3	144.4
Switzerland	109.8	117.2	119.2	120.8	122.0	126.4
Greece	126.9	143.9	163.1	182.8	205.8	244.9
Spain	115.5	135.1	158.9	197.9	237.0	274.2
Portugal	125.1	144.1	174.4	127.4*	155.4*	193.0*
Ireland	117.0	141.4	166.8	189.7	204.1	231.0
Average of small countries**	114.8	129.4	145.2	158.1	171.8	187.7

Source:
*1976 = 100
**1977–78–79 without Portugal

The different capital intensities cannot be explained by a significantly lower share of investment in machines and equipment influencing more directly the increase in production or a higher ratio of climatically determined building investment; in this respect no significant differences can be found between the two country groups.

Increasing relative capital intensity might be attributed to many interdependent phenomena. One cannot completely disregard that the institutional and goal system of the welfare state more extensively developed in most small countries or that a more intensive government centralization of incomes and sources of accumulation might indirectly motivate a lower efficiency of investment. Nor is it completely unjustified to assume that small countries affected more by deteriorating terms of trade could avoid a bigger loss of their economic dynamism only by increasing specific investment. Also there are several indications that the economic size of the nations can also significantly influence relative capital intensity. If one considers the correlations in the microsphere between the scale of production and specific inputs, it is difficult to deny that in smaller countries constraints on the economies of scale might influence the efficiency of investment. A higher incremental capital-output ratio or capital-intensity of growth seems to be a fairly general concomitant of development in small economies.

Despite a quite universal deterioration in external conditions of economic growth one cannot register a trend of diminished presence of small countries in the *international division of labour.* Foreign trade in goods and services represented an average 67 per cent of GDP in 1973 and 70 per cent in 1979, the relative importance of the external sector decreased only in Spain and Portugal struggling with problems of political transformation as well as in Denmark.

Within the above-the-average development of the external sector some changes can be registered also in the *product structure* of exports of the small countries. Between 1973–78 the share of engineering products in their exports increased from 27 per cent to 28.3 per cent (in the average of the big OECD countries there was an increase from 45 per cent to 47 per cent), that of the chemical products rose from 10.2 per cent to 11.6 per cent. At the same time the share of light-industrial and other processed products included in the category of lagging industries decreased from 34.6 per cent to 32.5 per cent, (a more marked decrease from 28 per cent to 23.7 per cent was registered in big countries). The share of four product groups (textiles, clothing, shoes, steel products) most exposed to the competition of the newly industrialized countries decreased from 15.5 per cent to 12.8 per cent. The intensity of adjustment in harmony with world market trends is, however, strongly differing by countries; the adjustment process is quickest in Ireland, Austria, Finland, slowest in Denmark, Portugal and Switzerland.

An analysis of export structures by major aggregates does not give, however, a sufficient orientation about the product mix within the big product categories or the eventual results of a break-through towards a higher quality and technological level, the evolution of relative competitivity. The above-the-average deterioration in the terms of trade of small countries as well as an above-the-average dynamism in recent export prices of the newly industrialized countries anticipate certain adversities in this respect. Scarce

Table 2
Export unit prices (1000 dollars/ton)

	Textiles		Clothing		Metallurgical products		Shoes	
	1973	1979	1973	1979	1973	1979	1973	1979
USA	2.0	n.a.	n.a.	n.a	0.32	0.79	n.a.	10.6
Japan	4.2	7.5	8.5	16.9	0.40	n.a.	n.a.	n.a.
FRG	3.9	6.7	18.7	40.0	0.26	0.53	9.9	21.9
Great Britain	2.5	6.5	n.a.	29.6	0.23	0.57	n.a.	15.3
France	3.3	7.3	24.1	41.6	0.25	0.52	7.5	14.2
Average of the big countries	3.6	7.0	16.4	32.1	0.29	0.53	8.7	15.4
Sweden	4.7	6.8	21.0	27.7	0.31	0.78	6.3	11.6
Norway	3.3	5.9	n.a.	n.a.	0.08	0.44	n.a.	n.a.
Finland	4.0	6.3	15.9	32.6	0.15	0.45	9.1	20.7
Denmark	3.2	4.9	18.6	34.7	0.26	0.45	8.0	16.3
Belgium and Luxemburg	2.9	4.7	14.9	21.9	0.21	0.43	7.0	10.9
The Netherlands	2.9	4.7	12.1	22.7	0.20	0.42	6.2	13.4
Austria	4.4	8.0	19.2	35.9	0.35	0.67	8.4	18.5
Switzerland	5.3	8.8	28.7	57.9	0.49	0.61	14.9	29.3
Greece	3.0	4.5	11.3	16.4	0.36	0.44	9.0	15.4
Spain	2.4	3.54	5.3	15.8	0.17	0.38	6.1	13.3
Portugal	2.2	4.3	9.0	17.6	0.38	0.43	6.4	9.6
Ireland	2.5	5.3	11.1	20.5	n.a.	0.86	n.a.	15.8
Average of small countries	3.1	5.2	13.0	25.5	0.22	0.47	7.0	14.5

Source: UN Yearbook of International Trade Statistics 1975; OECD Trade by Commodities 1979.

statistical data (see *Table 2*) on export unit prices are helpful in making some guesses about structural processes. Exports of small countries have been traditionally characterized by lower unit prices. Unit prices of big countries in 1973 and 1979 were 16 per cent and 35 per cent higher in the category of textiles, 26 and 24 per cent higher in case of clothing, 32 and 13 per cent in metallurgical products and 24 and 6 per cent with respect to shoes. In the group of small countries only Switzerland and Austria realized higher unit prices than the average of big countries, as to clothing Denmark and Finland, in the category of metallurgical products Ireland, Sweden, as to shoes Finland, Denmark and Ireland attained higher unit prices. Correlations with development level are far from being close. Highly developed countries like Sweden, Belgium-Luxemburg and Holland realize much lower unit prices than the big OECD countries, at the same time Austria, Finland and Ireland which are far from the top level of per capita GDP have in many product categories very high unit prices. It is quite tempting to assume that *ceteris paribus,*

internationally organizational bargaining power and market organization of the small countries does not facilitate the realization of unit prices achieved by bigger economies. At the same time this trend cannot be considered as an eternal fate, a development strategy stimulating vigorous specialization may result in above-the-average unit prices for the small countries, particularly in case of products sold on less oligopolized international markets.

Changes in the *relative market shares* are also reflecting some indirect consequences of economic size. Between 1973–80 Ireland, Finland, Spain, Norway and Austria could increase their shares within OECD total exports, at the same time Denmark, Sweden, Belgium, Luxemburg, the Netherlands, Portugal lost market positions. Size effects are reflected particularly in exports of engineering products where competitive terms of delivery require considerable financial capacities, an extensive domestic economic-organizational background, an adequate potential for transfer of technologies. This is felt especially in the present phase of international trade in engineering products when the main driving force of international demand is represented by purchases of countries at a considerable geographic and "economic environmental" distance from Western Europe. The relative market shares of five West European countries (Switzerland, Sweden, Denmark, Belgium, the Netherlands) representing the decisive majority of engineering export from small countries have been losing positions on engineering markets since 1973 (see *Table 3*).

Table 3
Relative market shares in total and engineering exports of the OECD countries (%)

	Shares in total OECD exports					Shares in engineering exports		
	1970	1973	1977	1979	1980*	1970	1973	1977
Sweden	3.16	3.05	2.67	2.61	2.45	3.47	3.49	3.08
Norway	1.14	1.18	1.22	1.27	1.40	0.73	1.04	0.93
Finland	1.07	0.96	1.07	1.06	1.13	0.49	0.47	0.74
Denmark	1.53	1.53	1.39	1.38	1.34	1.13	1.17	0.99
Belgium and Luxemburg	5.41	5.62	5.24	5.32	5.27	3.17	3.40	3.34
The Netherlands	5.48	6.02	6.10	6.02	6.07	2.96	3.16	3.00
Austria	1.33	1.26	1.37	1.46	1.43	0.88	0.89	1.00
Switzerland	2.38	2.37	2.42	2.51	2.40	2.09	2.18	2.12
Greece	0.30	0.36	0.38	0.37	0.39	0.01	0.02	0.01
Spain	1.11	1.30	1.43	1.72	1.59	0.60	0.79	0.96
Portugal	0.44	0.45	0.62	0.33	0.38	0.10	0.17	0.03
Ireland	0.46	0.54	0.62	0.68	0.69	0.09	0.15	0.25

Source: OECD Trade by Commodities. Series "B" 1970, 1973, 1977. Series "A" 1980.
*Data of January–September.

This trend has been particularly evident on the markets of the so-called power-sensitive sectors increasingly dominated by the suppliers of the USA, Japan and FRG, and where the weight of small countries has been traditionally low. In the OECD exports of aircraft motors the relative share of Belgium decreased from 3.3 per cent to 1.2 per cent, that of the Netherlands from 4.2 per cent to 3.1 per cent, in computer exports the share of Sweden decreased from 8 per cent to 3.6 per cent, in office machinery exports the Swedish share diminished from 4 per cent to 3.2 per cent, as to electrical power generating machinery the share of Sweden went down from 3.8 per cent to 2.7 per cent, that of Belgium from 3.8 per cent to 2.7 per cent, that of the Netherlands from 4.7 per cent to 3.9 per cent, whereas the position of Switzerland remained constant with 5 per cent. In telecommunication exports the share of Sweden decreased from 5 per cent to 4.4 per cent, that of Denmark from 1.3 per cent to 1 per cent. In instrument exports the share of Switzerland decreased from 19.4 per cent to 10.9 per cent, that of the Netherlands from 5 per cent to 4.7 per cent between 1973 and 1977. The weakening market positions of the biggest small country exporters have been hardly compensated by some spectacular results of late-comer countries like Spain, Ireland and Finland.

Among the products demanding extensive research and development as well as special skills the market positions of small countries tend to improve in the category of *pharmaceuticals.* Between 1970 and 1977 the relative market share of Switzerland increased from 13.4 per cent to 13.7 per cent, the Swedish share from 1.4 to 2.2 per cent, that of Belgium from 3.4 to 5.4 per cent, that of Ireland from 0.9 to 1.5 per cent, Austria increased its share from 0.6 to 1.2 percent, Spain from 0.5 to 1 per cent, while the market shares of 5.7 and 2.5 per cent, respectively, of the Netherlands and Denmark were stabilized. At present small countries represent some 40 per cent of OECD pharmaceutical exports and their market positions strengthened most in this sector.

It would be difficult to ignore that the new phase of international economic development affected the external conditions as well as the growth performance of small countries quite adversely. Their economic dynamism proved to be inferior to big countries, incremental growth required bigger capital inputs. A process of adjustment to external changes can clearly be seen in the structures of output and exports, nevertheless the rate of this process as well as its direction have been less successful than in bigger countries. Their export prices are less favourable, even in the lagging product categories, their aggregate market share tends to decrease, particularly on the markets of engineering products. Good performance can be registered first of all on the markets of pharmaceuticals, high-quality foodstuffs and special light-industrial products. Growth performances and market positions of the individual small countries do not indicate close correlation with development level, so a consideration of economic policies seems highly advisable.

Adjustment policies

All industrialized countries have taken action to cope with the problems of structural weakness brought to light by the new development patterns of the 1970s. Governments have tried to respond with structural policies, designed to affect the allocation of resources within the national economy. These policies have been widely different, reflecting deep differences in politics and culture as well as economic structure and size. An emphasis on these differences is quite relevant not only for the development patterns and chances for success of the respective national economies but also for a better understanding and elimination of economic conflicts that could endanger the national economic system. Actions of national governments included manpower, regional, industrial, capital market, etc. policies. Here, however, we are concerned mainly with overall development strategies affecting patterns of structural development in small countries and reflecting more directly the interrelations of changing world economy and economic size of the small nations.

The recognitions and practical experiences of military strategy had reflected already two thousand years ago that smaller countries or communities could not rely on a rigid defence on perimeter nor on a defence-in-depth, the chances of a successful strategy were linked to maximising *manoeuvring* capacity, mobility. In the economic sphere positive and negative experiences of the second third of our century supplied extensive information on the constraints and conveniences of development strategies which in small countries cannot have a defensive character, cannot prefer extensively long-term import--substitution or an excessive protection of lagging behind sectors, geographic areas and population groups, at least without serious long-term costs for socio-economic development.

In the hard international economic climate of the 1970s the *conflict of goals* between the necessarily offensive strategy of small countries and the increased security requirements arising from a major external vulnerability emerged in a particularly vigorous way. The development of a mechanism suitable to ease or eliminate external pressures of big powers, transnational corporations, or adverse market trends became a fundamental social task, since indefensible external pressures in open economies might not only undermine international economic positions but also lead to a collapse of political structures. A similar dilemma has been created by the order of values.

In the North–West European small countries characterized by a relative subordination of economic efficiency to broader considerations of public interest and social welfare, a long-term preference for a wider social consensus and stability as a social value, widely accepted views have been challenged by requirements of the structural adjustment.

Despite external shocks combined with strong political changes in Southern Europe no inward-looking development strategy *preferring* supply security, *protectionism* could be registered (apart from the 1974–75 events in Portugal). Up till recently government actions indicate that small countries participating intensively in the international division of labour interpret the concept of supply-security also in an offensive way. They

concentrate development resources on export-oriented activities promising an improvement of relative international market positions, competitiveness. This development strategy is based on the assumption that countries with an adequate export potential and/or international purchasing power have been able to cover their import demands. In such a concept economic security is a function of an adequate development of supply and urges supply-centred economic policies. On the import side the "political securing" of logistical lines, an adequate geographical diversification of supply sources as well as stockpiling are considered as fundamental tasks in order to be able to eliminate transitory supply difficulties in case some supplier fails to deliver. E.g. Switzerland had in 1980 – gold and foreign exchange reserves apart –, stocks of raw materials and primary energy in the amount of 3 000 million US $ [8]. Costs of supply security, supply diversification and stockpiling can be quantified and do not justify, particularly in case of limited import volume, the high social costs connected with a development of an own domestic raw material or fuel basis with a view to self-sufficiency.

Despite the unfavourable international trends in recent years development strategies of small countries have retained their offensive character and have continued expanding external economic relations. Their recent experiences indicate, too, that an increasing relative market share may improve their bargaining power. A successful implementation of an "escape forwards", a higher world-trade volume can increase their ability to resist economic retorsions, external pressures. Sometimes as suppliers, more frequently as importers of goods and capital even small countries can dispose of a minimum "economic deterrence capacity" adequate for prompting bigger powers to contemplate the economic consequences of power policies; great powers are nowadays obviously more sensitive to external economic relations than they were during the first half of this century. This minimum "economic deterrence capacity" might be instrumental in creating a situation where sharper conflicts, power pressures can be avoided or considerably diminished.

Within a quite universal offensive and externally oriented development strategy the choice of the direction of break-through is far from being indifferent. Long-term economic growth in Switzerland, Sweden, the Netherlands and Belgium was characterized by a considerable specialization in technologically-structurally *pioneering* sectors and products, by a reliance on comparative advantages stemming from human skills, innovations and considerable accumulation. A more intensive specialization in pioneering industries assumes an adequately developed domestic economic environment, considerable research and development as well as venture capital, optimum decisions, in other words also good fortune. A higher and export-oriented concentration of human and material resources assumes naturally certain organizational dimensions, too. In a West European comparison the share of big national or transnational enterprises is much above the average in the national economies of the aforementioned four small countries. This kind of strategy has to reckon not only with the growth-dynamising effects of technological and organizational rents realized in the international division of labour but also with eventual economic losses, disequilibria tensions generated by wrong decisions, adverse international trends or inadequate performance of 1–2 big enterprises. As a consequence of

recent trends in world economy even these industrially most advanced four small countries have met with difficulties in following the long-term strategy, their relative market positions have generally weakened in many power-sensitive and pioneering sectors. After some promising initial results in the early seventies a break-through towards the international vanguard was increasingly braked down for Denmark, Austria and Spain. Disharmonies in domestic socio-economic environment might generate some desintegrating effects of this strategy. A more successful economic adjustment in the Bask and Catalan regions of Spain or in Flanders in Belgium have been increasingly hampered by various obstacles to domestic technological-economic spillover and the social as well as political tensions were strengthened by uneven regional or sectoral development.

There are increasing indications that small countries face ever bigger tasks and difficulties in building up and maintaining positions on the international markets of high-technology and power-sensitive industries requiring extensive technological, financial and organizational background. Under the circumstances of more intensive international fluctuations quite a few industrial countries and enterprises had the experience that risks and economic losses of exporters with a more diversified supply have tended to be smaller, while the dynamics and relative stability of export earnings showed a correlation with the extent of diversification. The dilemma of stability and structural progress seems to be much more acute for small countries since in general they are incapable of developing a diversified supply in the categories of high-technology products.

The industrially most advanced four West-European small countries have been compelled increasingly, the other, industrially late-comer European small countries decisively to rely on implementing a "*follow-up*" strategy. A follow-up strategy does not *eo ipso* exclude vanguard positions on the international markets of one or two products or activity lines enjoying comparative advantages based on special natural endowments, human skills or production traditions. The share of these pioneering products in GDP or exports is, however, much lower than in case of the previously mentioned strategic variant. Consideration of the strategical constraints imposed by limited economic size implies that small economies have to adapt on a much wider range technologies developed in big countries, they are compelled to share risks and at the same time development rents with big countries. Strategies of technological adaptation and diversification assume, however, very intensive international and inter-enterprise *cooperations*, wider specialization based on certain stages of the production process (spare parts, components, etc.) since the imports and marketing of high-technology products have become increasingly difficult without very intensive and organic interfirm cooperation. An industrial diversification promoted by intensive international inter-firm cooperation diminishes the risks of research and development, specialization and marketing. It is, however, excessively sensitive to changes in the international political climate or economic policies. A big number of case studies have supplied evidence that industrial cooperations requiring intertwining on a broader scale (research and development, financing, production, marketing, etc.) are very sensitive – depending on complexity – to mutual confidence and to stability of the political and economic climate. As indicated quite spectacularly by the

experience of Spain, Greece and Portugal this strategy requires adequate responses also from the non-economic sphere (e.g. domestic and foreign policies) in order to create a proper economic manoeuvring field.

Finally, events of the last decade have emphasized even more the interrelations among the economic size of nations, an expedient development strategy and economic *organization.* Debates on economic policy in small countries (particularly in Norway, Spain and Austria) have underlined that a vigorous development of the raw material or energy sector, or of semifinished products can nowadays hardly be assumed without a strong direct *state* presence. It leads necessarily to an increasing centralization of resources, a relative rigidity of economic structures and a weakening of adjustment ability. An international vanguard position of the export-carrying branches in Sweden, the Netherlands and to a smaller extent in Belgium, Switzerland and Spain was linked at the same time to *big,* frequently *transnational enterprises.* So far the realization of technological and market-organization rents has assumed a key role of big enterprises. The so-called follow-up strategy, reflected increasingly in recent development patterns of small countries, implies not only a major decentralization of development resources but a bigger number and higher operational autonomy of *small and medium enterprises.* Objective determinants of the economic organizations cannot be disregarded by any scientifically based development strategy.

As recent historic experiences suggest small is not unconditionally and universally beautiful, nor fortunate but definitely capable of surviving.

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ПРОБЛЕМЫ, ПОЛИТИКА И НАПРАВЛЕНИЯ ЭКОНОМИЧЕСКОГО ПРИСПОСОБЛЕНИЯ МАЛЫХ СТРАН ЗАПАДНОЙ ЕВРОПЫ

Б. КАДАР

В начавшемся в 70-ых годах новом периоде мирохозяйственного развития, характеризуемом более медленными темпами экономического роста и более частыми и сильными потрясениями, малые страны, вынужденные в большей степени опираться на движущие силы международного разделения труда, испытывают все больше трудностей в связи с экономическим ростом. Сокращение динамизма мировой экономики и мировой торговли, смещение динамики цен, ограничение возможностей индустриализации на основе обработки импортируемого сырья, перемещение наиболее динамично развивающихся регионов мировой экономики на внеевропейские территории, возрастающее значение для экономики т. н. власти организаций — все это в последние годы неблагоприятно влияло на условия экономического роста небольших стран Европы.

Анализ показателей роста малых западноевропейских стран говорит о том, что в прошедшем десятилетии в ведущих активную социальную политику небольших западноевропейских странах в среднем количество безработных было ниже, чем в ведущих странах ОЭСР, однако темпы экономического роста, относительная капиталоемкость, изменение товарного состава их экспорта, уровень цены на товарную единицу экспорта, степень внутреннего и внешнего неравновесия, как правило, были менее благоприятными. В экспорте странами ОЭСР товаров, представляющих наиболее высокий уровень структурно-технического прогресса, удельный вес малых стран в большинстве случаев уменьшился.

В политике экономического приспособления малых стран сильнее, чем обычно, отражаются конфликты между необходимостью следовать наступательной стратегии развития, возросшими в неблагоприятной мировой экономической обстановке требованиями экономической безопасности и обязательствами, накладываемыми социальной политикой. При сохранении и даже усилении стратегии развития, ориентирующейся на внешние рынки, в специализации увеличиваются элементы не «прорыва», а «следования». Все в большей степени проявляется взаимосвязь между размерами страны, стратегией развития и организацией экономики. Предпочтение развития энергетического сектора, производства изделий-полуфабрикатов сопровождается усилением экономической роли государства, предпочтение развития передовых в техническом отношении отраслей — усилением роли транснациональных монополий, а применение стратегии «следования» — расширением поля деятельности небольших и средних предприятий.

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CHINA'S ECONOMY IN THE NINETEEN-EIGHTIES

(Problems and Prospects)

The People's Republic of China entered the 1980s amidst heavy economic problems and tensions in its domestic policies. What this decade may hold in store for economic development and rise of this fairly poor and backward country having near to one billion inhabitants? The author searches for answer of this question in his present study.

The People's Republic of China entered the 1980s amidst sharp tensions in its domestic policies and a multitude of grave unresolved economic problems. The policy of 'readjustment, restructuring, consolidation and improvement', an ambitious project to create the preconditions to the 'four modernizations', failed to yield the benefits forecast in 1979, and forced the country's leadership to grant the venture a period of grace. This in turn has caused a considerable delay in the preparation of a medium and long-term development conception for the Chinese economy, as well as in the clarification of the basic principles, guidelines, matters of content and methodology of the reform of economic control and management. Certain leading Chinese personalities have in last months been quoted as saying that the difficulties, conflicts and the imbalance that have resulted from erroneous economic policy have only been aggravated by careless and hazardous measures in the past few years which in their turn have worsened China's internal and external position, pushed its balance of payments further into the red and accelerated inflation. All these developments point to the obvious conclusion that the country's political and economic leaders must pursue a well grounded and carefully considered *policy of stabilization* if they wish to overcome difficulties.

In order to elaborate and successfully implement such a policy of stabilization it would be certainly very necessary to assess the present situation on a common theoretical basis, to interpret consistently and implement in a uniform manner all the tasks that recent developments in China's society and economy entail, to outline perspectives for progress with sufficient clarity, to achieve unity of objectives and endeavours, and – last but not least – to ensure stability of cadres, and that at all levels of economic and political management. However, there appear to be far less stability and unity even at the top of the Beijing pyramid than would be desirable, considering the paramount importance of the issues at stake: the events and developments of late 1980 and the first half of 1981 seem to indicate that there is a continued and bitter power struggle between rival trends and groups in the uppermost bodies of state and party leadership, seriously hindering these bodies in

properly fulfilling their duties in management, organization and supervision, and making it unavoidable for the country's leadership to be willing to make temporary compromises on certain occasions to avert open confrontation.

Thus, if we wish to make a forecast regarding the foreseeable development of the Chinese economy in the 1980s, it might be useful to give a brief outline of the trends and groupings struggling for power in the country's leadership, the basic questions that are the subject of argumentation, and to examine the principal trend this battle has taken in recent years in the context of power relations within post-Mao management and the composition of the power *élite*.

Differing assessments of achievements and errors in the past three decades

Taking stock of achievements, failures, results and errors in the past three decades in China, as well as drawing the necessary conclusions are essential tools for being able to map out tasks and future trends for China's economic and social progress. The Party's leadership, published its official evaluation of the last 32 years on July 1st 1981 only after preparations lasting for more than two years, on the occasion of the both anniversary of the party's foundation, and undertook to draw some conclusions and lessons. The principal reason for this is the substantial disagreement within the party leadership and among the various strata and generations of the 39 million party members over the judgement of the activities and responsibility of party leadership, and in particular of Mao Zedong, in the developments of the past 32 years. [1]

As is known, almost half of the present CCP membership joined the party after 1966, and at least half of the 20 million cadres of today got their senior posts in the ten years of the 'cultural revolution'. These members and cadres continue to be attached to Mao Zedong Thought owing to their positions, past activity and education, and regard as rightist, revisionist 'deviation' – or a shift towards capitalism – anything that has departed from the track of the cultural revolution since Mao's death. Although they have, in the wake of a series of purges and rehabilitations, been removed from their senior posts in party machine in the past few years, and although those few that have been left to stay have very shaky ground under their feet, nevertheless, there are a considerable number of diehards in the middle and lower ranks, putting up open or covert resistance to the party's present policies. To them it is not at all self-evident that the principles and political practices of the 'cultural revolution' were a deplorable deviation towards the extreme left, not even when it is no longer Mao Zedong but his 'closest comrades in arms' Lin Biao, Chen Boda and the 'gang of four' that are held responsible for these malpractices. This explains why it was only four years after Mao's death that the 'cultural revolution' was unequivocally condemned and came to be referred to as such only in paren-

theses – to indicate its pejorative meaning – and that there was an opportunity – and sufficient courage mustered – to bring the master-minds of the cultural revolution to court under the additional charge of plotting against Mao's life. The fact that these events and developments coincided in time with the spectacular suppression of Hua Guofeng convincingly proves that the group of cadres risen to the top under the "cultural revolution" could for a long time considerably hinder and brake the profound revaluation and correction of the policy pursued in the preceding two decades.

One of the most influential groups in the present CCP leadership – headed by the twice-rehabilitated Deng Xiaoping – had originally sought to condemn only the ten years of the cultural revolution and rid China and the Communist Party once and for all of all its disruptive effects on society, the economy and top cadres. They give a positive overall evaluation on the first 17 years of the People's Republic of China, including Mao Zedong's theoretical and practical work in this period as well as the years of the 'great leap', while acknowledging that there occurred in these basically positive 17 years certain errors and distortions which, however, the party leadership recognized and corrected in time. This party group likes to recall the outstanding achievements of the policy of 'readjustment' between 1961 and 1965, the rapid restoration of equilibrium within the economy, the spectacular development in agriculture and industry between 1963 and 1965, the as yet mostly unsurpassed indicators of technology and economy, and the surprising successes of Chinese science and engineering (e.g. production of nuclear weapons). We may recall that this period was characterized by the domination of political and economic management by Liu Shaoqi, Zhou Enlai and Deng Xiaoping on the levels of both party and government, while Mao Zedong was compelled to admit his faults and retire to the background. At the same time it is also evident that the three leaders mentioned were themselves responsible for the policy of 'three red flags' announced at the second session of the 8th CCP Congress in May 1958, a policy initiating a new trend in party policy, the 'great leap' and extension of the system of people's communes. To the adherents of this trend a reversal to the policy immediately preceding the 'cultural revolution' may seem an optimal alternative if for no other reason than for the fact that the CCP was then already sharply opposed to the Soviet Communist Party and the majority of parties rallied under the banner of international communism: while brandishing ultra-revolutionary slogans to bring about dissidence, China was already taking tentative steps to expand its contacts with leading Western countries. (It should be noted that the advocates of this policy thought another 'great leap' feasible in 1978 that would have been given financial and technological support by the advanced Western countries.) By electing Hu Yaobang first as the secretary general and then as the chairman of the CCP and appointing Zhao Ziyang president of the State Council of the People's Republic of China, this group considerably strengthened their positions in the top ranks of government and party leadership.

The 3rd plenary session of the CCP Central Committee in December 1978 served as an occasion for the top ranks of the CCP to introduce a new trend that was to exert a perceptible and ever increasing influence on the party and the country's domestic policy and in particular on the direction China's economic policies were later to take. The emergence of this trend can be seen as a compromise reached in the battle between the two rival groups and between the trends each of them had represented. As a result a number of veteran cadres were rehabilitated, people who – well before the 'cultural revolution', i.e. already at the time of the voluntaristic policy of the 'great leap' – had been sharply opposed to the left-deviationist direction followed by Mao Zedong and his supporters.

What underlay the compromise was that while Deng Xiaoping's group would have liked to see Liu Shaoqi rehabilitated – the first such attempt – at this plenary, thereby enforcing a public critique to abandon the whole idea of the 'cultural revolution', the group of cadres inherited from the cultural revolution, headed by president Hua Guofeng were only willing to condemn left-deviationism on condition that such condemnation were not confined to the cultural revolution but went back to the roots, i.e. the policy of the 'great leap', and that only the opponents of this policy were to be rehabilitated. Thus it happened that the 3rd plenary rehabilitated Peng Dehuai, Zhang Wentian, Yang Shangkun and Tao Zhu posthumously, as well as Chen Yun, Huang Kecheng, Peng Zhen and Bo Yibo, the latter of whom were restored to various top positions.

In the context of the emergence of a new trend it was of particular importance that Chen Yun was appointed head of the appointed head of the CCP Disciplinary Control Committee and of the Economic and Finance Commission of the State Council: he and the working commissions in various bodies under his leadership acted as a magnet to rally up the majority of rehabilitated economists and professionals who believe that China's option in 1958 for its 'own way' of economic development was an error, and condemn the ensuing left-deviationist distortions in China's economic policies pursued for almost twenty years. In the spring of 1979 this group sharply criticised the ten-year draft economic plan for 1976–1985 prepared in the State Planning Commission on the basis of Deng Xiaoping's guidelines and under his supervision, and adopted at the first February session of the Fifth National People's Congress in 1978 on the motion of party leader and Prime Minister Hua Guofeng.

In response to this critique, some unrealistic goals in the draft plan were modified at the second session of the 5th NPC in the summer of 1979, and it was also announced that the policy of 'readjustment, restructuring, consolidation and improvement' was to be pursued in the three years of 1979–81, without which, they argued, no success could be achieved in implementing the 'four modernizations'. In just over a year the outgoing premier, Hua Guofeng, was compelled to announce at the third session of the 5th NPC in September 1980, that the draft plan adopted in 1978 had already lost its relevance and had been taken off the agenda.

The group of realistic economists introduced in the past two years changes in the priorities of economic policies and development, placing particular emphasis on an increased pace of development in agriculture and light industry, restraints on development in heavy industrial production and investment, and on accelerating progress in housebuilding and development in the network of services. Besides, they also conducted significant theoretical and practical activities chiefly as regards the summary assessment of positive and negative results of three decades of economic development and the concrete lessons that can be drawn from them for the benefit of a new economic reform to be drawn up. These economists followed with keen attention the experience accumulated in other socialist countries in the field of economic development and economic control and management. A large number of publications appear in Chinese dailies and periodicals; contributions from the group of advanced economists. Although few of them have so far climbed to the top bodies and organizations of the party and the state their impact on ideology and economic policies is so significant that both major groups referred to above have to be increasingly aware of their presence.

Finally, there has emerged a trend, and one with some influence, in the top management of the state and the party in recent years that would like to bring about some kind of restoration of the social and economic structures that prevailed in China more than a quarter of a century ago. Adherents to this group point out that the country's leaders took much too hasty decisions when they wound up private trade and private enterprise, with special regard to the speedy demolition of privately-owned servicing enterprises. They also deplore instances of nationalizing companies in foreign capitalist ownership. It is not difficult to recognize that this group wishes to reawaken Mao Zedong's concept of "new democracy" and to create a pluralistic social and economic organization which would then be composed of a broad variety of forms of ownership such as the socialist economic sector based on public ownership, the semi-socialist sector of joint, state and privately-run ventures, a private sector incorporating small private producers and private services, and a private capitalist sector to provide opportunities both for the domestic and foreign-based Chinese bourgeoisie to invest their capital, and for foreign firms to establish subsidiary companies in China. What the representatives of this trend really want is to reproduce the socio-economic relations and multi-sectoral economic structure prevailing prior to 1953 – at the level of economic development already attained – leaving wide scope for economic competition between the individual sectors and to regulation of the economic processes through the market mechanism.

It is also conceivable that the second group, i.e. the one rallied around Deng Xiaoping, will want to cooperate with the representatives of the abovementioned trend, and grant further concessions to them, if the third group keeps growing in strength in the future. It is also in their interest to do so, since they might in this way expect the advanced Western countries to provide them with increased assistance in the spheres of economy, technology, finance and armament. The endeavours of the latter group are in line with the long-term strategies of China's major Western partners who seek to bring

about a gradual change in the country's present social and economic structure. If such a trend were to emerge, it would probably induce the third group to join forces with the first one, who still have many members in lower level management, and they would then mobilize the still susceptible Chinese masses to fight rightist and revisionist trends under banners with slogans of the left.

The present domestic scene in China now contains the germs of a fairly wide variety of alternatives from the point of view of future trends in the country's social and economic progress, this is a factor that we must by all means take into consideration when attempting to make a forecast for Chinese economic growth in the 1980s. A specifically important point to be considered in the context of alternative trends is that the present struggle for setting the principal direction of progress might well lead to conflicts and unexpected turns in the rival groups and factions in the top management of this politically unstable country grappling with enormous difficulties and groaning under the pains of social and economic development.

The present economic situation and how it is viewed by the various groups in Chinese leadership

Figures and other information published in China up to the end of April 1981 indicate that economic development in 1980 was directed to meet the criteria of the policy of 'readjustment' even though some of the objectives were not attained. It was a major economic success that a relative balance was established between light and heavy industry by initiating dynamic progress in the former and a planned decrease in the latter.

According to the report of the State Statistical Office of the Chinese People's Republic on the results of the implementation of the national economic plan for 1980, published on 29th April, 1981, the global value of industrial output increased in the last year by 8.7 per cent and amounted in absolute terms – at 1970 constant prices – to 499.2 bn Yuans. [2] Within it, the output of the light industries increased by 18.4 per cent, while that of the heavy industries by merely, 1.4 per cent. In consequence, the value of light industrial output (234.1 bn Yuans) rose within the total of industrial output from 43.1 per cent in 1979 to 46.9 per cent, while, parallel to that, the value of heavy industrial output (264.8 bn Yuans) declined from 56.9 per cent to 53.1 per cent. This rather rapid development in the industry was attained with a 6.6 per cent increase of the production of electric energy, while the production of primary energy fell by 1.3 per cent, indicating thus an improvement in the efficiency of energy production. In 1980 the output of electric energy was 300 bn kWh, of hard coal 620 million tonnes, of crude oil 106 million tonnes, of natural gas 14.3 bn cu.m. was produced. The output of further important industrial products was as follows: crude steel – 37.1 million tonnes, rolled steel – 27.2 million tonnes, cement – 79.9 million tonnes, fertilizers (in effective substance) 12.3 million tonnes, machine tools – 134 thousand units, tractors – 98 thousand pieces, handtractors – 218 thousand pieces, Tv sets – 2.5 million pieces, radio

sets – 30 million pieces, cotton fabrics – 13.5 million metres, machine-produced paper and cardboard – 5.35 million tonnes, sugar – 2.57 million tonnes, bicycles – 13 million pieces, wrist watches – 22.2 million pieces.

Despite unfavourable weather conditions and the rather poor harvest results of plant cultivation, the gross value of agricultural production increased in 1980 by 3.3 per cent and amounted to 162.7 bn Yuans at 1970 constant prices. Cereals production fell from 332 million tonnes in the preceding year to 318.2 million tonnes, but even so it exceeded the almost 305 million tonnes level of 1978 by almost 13 million tonnes. The output of cotton increased by 22.7 per cent, and thus a record level of 2.7 million tonnes was attained. Also the development of livestock can be said to be favourable, though the 13.5 per cent increase of meat production made its effect felt in the end-year figures of the stock, particularly in respect of pigs where a 4.5 per cent decline occurred against the figures of the preceding year.

Thus, the combined gross output of industry and agriculture amounted in 1980 to 661.9 bn Yuans – at 1970 constant prices – that is, increased by 7.2 per cent over the preceding year. The national income rose at a somewhat slower rate (6.9 per cent), attaining 363 bn Yuans, or about 227 bn US dollars. [3] It follows that the per capita national income in 1980 was 369 Yuans or 230 dollars – reckoning with an end-year population of 982.5 million. The contribution of the industry to the national income was 47 per cent, of agriculture 29 per cent and of the others branches 24 per cent. In view of the fact that according to certain publications the share of accumulation within the use of the national income fell from 36.6 per cent in 1978 and 33.6 per cent in 1979 to about 30 per cent by 1980, [4] the accumulation fund was about 109 bn Yuans – at constant prices – against 254 bn Yuans of the consumption fund, which, converted to dollars means an average 168 dollars of per capita consumption level.

The sum of budget-financed state investment fell in the last year by almost 25 per cent, while the sum of the investment made the economic units in social ownership by 4.7 per cent, amounting thus to almost 54 bn Yuans. Within that figure, the value of newly created fixed assets was 79.2 per cent. In 1980 new dwellings were built with a floor space of 145 million sq.m., 20.8 per cent more than in 1979.

Retail sales increased in 1980 by 18.9 per cent, and attained the sum of 214 bn Yuans. In view of the price rises, the actual increase was 12.2 per cent, implying a 6.7 per cent – also officially acknowledged – rate of inflation. According to reports from unofficial sources, the actual price rises were substantially higher in the country, because producers sold a part of the consumer articles on free market at "free prices" conforming to demand and supply. According to the publication of the Statistical Office the sales of some staple consumer articles increased by the following percentages in the preceding year: edible oil – 20, pork – 15.3, sugar – 9.2, cotton fabrics – 7.6, fabrics from man-made fibres – 32.4, leather shoes – 34, sewing machines, bicycles, radio sets and wrist watches betwen 23–66 per cent.

The total foreign trade turnover attained in 1980 56.3 bn Yuans, that is, 35.2 bn dollars, which means a 23.6 per cent increase over the preceding year. Within that exports

were 27.2 bn Yuans (17 bn $), imports 29.1 bn Yuans (28.2 bn $), indicating a 28.7 per cent increase in exports and a 19.2 per cent one in imports. Thus, the balance of trade of the country showed in 1980 a deficit of 1.9 bn Yuans or 1.2 bn $

The number of urban workers and employees rose last year by 9 million, and was at the end of 1980 104.4 million. Within that, employment in state-owned enterprises and institutions was 80.2 million and in the economic units owned by collectives 24.3 million. The average nominal wage attained in the former 803 Yuans in 1980, in the latter 624 Yuans, which means in real terms an increase of 6 and 7.1 per cent, respectively. Annual income from collective work in the communes did not attain 86 Yuans per inhabitant, that is, it was by merely 2.5 Yuans higher than in the preceding year. But these data do not yield satisfactory bases for judging the living standards and consumption of the urban and village population, if only for the fact that the former data refer the total earnings of an employee, and the latter to the non-complete income of a family member. It is thus necessary to add some remarks to the report on plan fulfilment.

How matters actually stand in the field of consumption can be deduced from figures published in a series of representative surveys conducted by the State Statistical Office. One of the reports, covering 86.955 families in 44 towns, established that the monthly income per head in working class and administrative families was an average of 35.8 Yuans at the beginning of 1980, which comes up to 430 Yuans per person a year. 55.1 per cent of family members in the surveyed population were gainfully employed (2.47 persons out of an average of 4.48 persons per family), i.e. every gainfully occupied person had an average of 1.81 dependants to provide for [5]. By contrast, a survey covering 10.282 rural commune members and their families in 408 districts of 23 regions, towns and autonomous areas indicated that per capita net income in 1979 was only 160.2 Yuans even though this figure is said to have risen by 20 per cent over the previous year.[6] 63.6 per cent (102 Yuans) of this sum came from collective farming, 27.5 per cent (44 Yuans) from private farming, and 8.9 per cent (14.2 Yuans) from other sources. These families, however, had an average of 5.66 members of which only 2.38 (42.1 per cent) were gainfully occupied, bringing the dependant wage-earner ratio to 2.38, coupled with a significantly lower per capita income. It is easy to calculate from the above figures that while the average wage-earner in worker and administrative families made close on 650 Yuans annually, the figure for the commune member was a mere 381 Yuans, i.e. 58.7 per cent of the former. The same survey showed that subsistence costs per person in these families stood at 134.5 Yuans in 1979 of which a breakdown is presented in the following table: [7]

Cost items	Yuan	Per cent
foodstuffs	86.0	63.9
clothes	17.6	13.1
dwelling	7.7	5.7
other fixed costs	11.2	8.3
fuel (for heating)	8.3	6.2
culture, entertainment	3.7	2.8

What all this points to is that the majority of China's peasantry of 850 million live on a level that can be provided for an average of $ 84 a year in goods and services. Given the fact that the latter survey points to 10 per cent of families in which the per capita net income was short of 80 Yuans ($ 50), and another 8 per cent with a per capita figure of less than 60 Yuans ($ 38), one can imagine the dilemma the country's leadership is faced with when deciding on the measure and degree of differentiation in raising the living standards of about one billion people. It is also doubtful whether to grant any increase rather than keeping the standard of living at its present modest level for a while, levelling existing differences and – consequently – increasing the relative share of accumulation in the increment of national income.

This dilemma is all the more a pressing one for China's leaders since the measures taken in the past two years to raise the living standard of the population (e.g. wage rises of 10 to 15 per cent for certain categories of workers and other employees, an increase of 20 and 50 per cent in the state procurement price of 18 products offered for compulsory state purchase, resp. any quantity in excess of that, a substantial increase in state-subsidized housebuilding, various tax reliefs and reductions, private licences in small trade, handicrafts, commerce and some services, etc.) have had somewhat controversial results. In their wake there has been a sharp rise in social purchasing power (increments of over 40 billion Yuans from 1977 to 1979, and 20 billion Yuans in 1980 alone [8]), small trade is beginning to boom and there is a lively demand for services. On the other hand demand for many everyday consumer goods exceeds supply, there is a shortage of goods creating substantial price increases, and – in the case of certain articles – black market practices, selling 'from under the counter' and smuggling, phenomena quite unknown in China for decades, have reappeared and spread. Owing to official and hidden increase in prices the people's currency (renminbi) has in the past two years been hit by inflation of over 15 per cent, something quite unusual in China for some decades. Due to a further rise in government spending and failure in holding back investments the budget deficit dropped from 17 billion Yuans in 1979 to only 12 billion Yuans in 1980, although the 1980 budget envisaged a drop in deficit to 8 billion.[9] The 1981 budget wishes to eliminate the deficit by reducing expenses by almost 15 bn Yuans. [10]

It is not particularly surprising under such circumstances that there exist remarkable differences of opinion between the various trends and groups in China's leadership over the assessment of the present economic situation and the order of importance of the tasks ensuing from it, as is well reflected in various press relates and publications in China. The tone of discussions on the assessment of economic progress in recent years and identification of tasks for the future ranges from often dramatic criticism and self-criticism to general satisfaction over achievements and the present situation.

Many articles propose one thing at the beginning only to refute it at the end, demonstrating how difficult it must be for the Chinese leadership to maintain the appearance of unity towards the outside world and to reach even temporary compromise between the rival factions at war with one another for supreme power. A case in point is the Jan. 1, 1981 editorial of Renmin Ribao, entitled 'The enormous task of readjustment must be accomplished on the basis of peace and unity!' [11]

The present debate is one in which the survivors from the age of the 'cultural revolution' are being forced into the defensive and are more and more often the object or rather the target of growing criticism. Hua Guofeng had to exercise self-criticism and resign his post of prime minister at the 3rd session of the 5th National People's Congress, and at the 6th plenary Session of the CC CCP held in June 1981 he had to give up his post as chairman of the Party and rest satisfied with remaining deputy-chairman. Also dismissed was Yu Qiuli, former chairman of the State Planning Commission and Vice-Premier (he was transferred to the post of head of the State Energy Commission). Kang Shien, Vice-Premier and former head of the State Economic Commission was appointed oil minister. Among those dismissed were former oil minister Song Zhenming and Xiao Han, minister for the coal industry. Sharp criticism was levelled against Vice-Premier Gu Mu, chairman of both the Trade Commission and the Foreign Investment Commission, Tang Ke, minister for the foundry industry, and Sun Jingwen, minister for the chemical industry. The persons deposed in this drive had all been promoted to their former positions at the time of the 'cultural revolution'. Curiously enough, these people had to bear the responsibility for measures that they had only executed and whose underlying principles had been laid down by the group headed by Deng Xiaoping. Cases in point are the ten-year draft economic plan adopted early 1978, which was built on Deng's accelerated industrialization conception; the great plans of ambitious investments in industry and infrastructure for the implementation of the draft economic plan that they sought to execute through a substantial expansion of productive machinery imports from the capitalist West, by a rapid growth in Chinese exports of fuels and primary commodities to the Western partners, and by raising loans of tens of billions of dollars. (As is known, the draft economic plan envisaged investment in a value of about 645 billion dollars, three years' total national income, for the eight years to come, one-fourth of which would have been realized through purchase of production equipment from advanced capitalist countries, a project that would have needed a minimum of 60–70 billion dollars in loan from capitalist sources.)

In the present state of affairs, the pragmatist group of Deng Xiaoping are forced to manoeuvre in a number of ways in domestic policy and particularly in the spheres of ideology and economic policy, even though they possess some of the commanding heights in other areas. With a view to further strengthening their positions in state and party management, they launched a massive offensive in the spring of 1980 against the 'extreme left' and orthodox Maoist groups of the cadres left in their posts since the 'cultural revolution', and have since succeeded in gradually pushing them out of the top leadership. Major stages in this battle have been the 5th plenary session of the Central Committee of the Chinese Communist Party (Liu Shaoqi's rehabilitation), the 3rd session of the 5th NPC, the 'trial of the ten' and the 6th plenary session of the CC CCP. At the same time – and obviously in an attempt to rally allies for the struggle – they made further concessions towards the realists who gathered round Chen Yun in matters of ideology and economic policy, while they tried to shift responsibility for failures in domestic policies

and economic policies in the previous years on Hua Guofeng and other leaders who had been appointed before October 1976.

Being in a position of strength, this group has since early 1981 carried on with its activities under the slogan of 'unity and stability' and even repeatedly announced that "China's present domestic situation was the most stable since 1960." [12] They lay special emphasis on the favourable changes in rural areas, the relatively rapid development in agricultural production in 1978 and 1979, the substantial rise in the procurement prices of agricultural produce. As a result of this all there has been a considerable increase in the living standards of the majority of the peasantry. They also consider it as a major victory that services provided by private artisans and trade and private enterprise have gained in significance in the pas one-two years, largely facilitating satisfaction of the people's needs in major towns. They like to refer to the restoration of law and order, and as its shining proof recall the trial of the 'gang of four' and the 'conspirators' belonging to Lin Biao's clique.

Adherents to the realist group however keep pointing to the shortcomings resulting from the policy of 'adjustment', and to the widespread occurence of voluntarism, subjectivism, incompetence, lack of organization and care. They reiterate that many people in leading positions in party and state management – including those in the Central Committee and the economic bodies under the authority of the State Council – still cannot understand the essence of China's new economic policy and are reluctant to see that its principles are enforced. This has a particularly unwholesome effect on investments, a field where a positive turn has not yet been achieved. Most production units have failed to adjust themselves to new requirements, causing further rises in production and administrative costs. Some foreign trade enterprises and ministries continue to import expensive machinery that cannot be put to any use as yet and are being stored in hope of better days in a value of several billion dollars.

As a result of these facts the financial equilibrium of the economy has been seriously impaired, there have been stoppages in materials and fuel supplies, inflation has increased at unexpected rates, companies have experienced difficulties in meeting their obligations and delivery dates, and have been unable to make full use of their productive equipment. The process led by 1980 to a situation in which the combined value of accumulation and consumption exceeded that of the national income created, and state expenditure exceeded revenues. Representatives of the realist view strongly call for the consistent elimination of disorganization and anarchy, pressing for strict adherence to fiscal discipline and a general overhaul of economic control and management. They emphasize, however, that this needs wide-ranging informative work and education in the areas of politics and ideology on the basis of the four principles laid down after the 3rd plenary session of the CC CCP in December 1978, notably adherence to the socialist road, dictatorship of the proletariat, the leading role of the party and to Marxism-Leninism and Mao Zedong Thought.

Members of the "new democracy" group are displaying tact and circumspection in the present economic situation: they refrain from dramatizing the events of the recent

past, nor do they express clear-cut opinions, and they are reluctant to prescribe what practical steps should now be taken. Instead they write theoretical articles – or have them written – which are largely based on classical Marxism and Leninism and Mao's pre-1953 teaching. They emphasize the necessity of various forms of state capitalism under the dictatorship of the proletariat and popular control, the acceptability of private enterprise, and the economic profitability and significance of the family plot for farming and other auxiliary occupations. They prefer analysing the new economic policy (NEP) introduced into the Soviet economy in 1921, with frequent references to Lenin in support of their arguments. It is perhaps worth mentioning that according to some authors, the changes that have taken place in the past one or two years have brought about a new situation in China's economic structure in which the two fundamental types of socialist property – state-owned and collectively owned property – are complemented by additional seven types of ownership.[13]

Taking all this into account, the Chinese leadership will have a difficult job in bringing about a compromise between the endeavours and goals of major trends and groupings that would also answer the objective requirements of the country's social and economic progress, one that would help to draw up realistic medium-term national economic plans for the coming 5 to 10 years. If the present conditions prevail the oft-quoted 'four modernizations' will come to no more than an empty slogan. While bitter struggle is continuing at the top between rival groups for the 'commanding heights' they tend to lose control of regional, municipal and other forms of territorial control, and it is more and more the authority of local government, itself fraught with dissent, what sort of economic planning and management prevails in their own areas. This makes it increasingly difficult to make any kind of forecast on economic growth in the coming years of decades, since the goals and results of economic processes in the micro-sphere are often contradictory and are therefore different from those evisaged in planning and management on the macro-level. Nevertheless I shall try to draw up – and quantify in the form of indicators – a two-stage alternative for economic growth in the next ten years that appears viable if a reasonable compromise, one that takes the present situation and the priority of economic growth into account, is reached. Due to recent developments, this growth pattern is different in some respects from forecasts that I have published before, both as regards 1985 and 1991. [14], [15]

Prospects for China's economic growth in the 1980s

Judging by experience it can be said that the rate and proportions of Chinese economic growth are determined much less by economic than other factors such as the goals and endeavours – both strategic and ideological – of the state and party leadership. The only change from the past is that at present there is no all-powerful person or group as was the case in Mao's time, and, secondly, the country's leaders have for some years been trying to make the people understand that China's social and economic progress was seriously hampered by the policy of subjectivism and

voluntarism pursued earlier. By so doing, they hope to avoid the recurrence of similar errors in future.

It would, however, be a mistake to believe that in the period to come non-economic factors will only have a limited role to play in Chinese economic growth, its rate and proportions, and to expect these factors to be forced in the background from the position they have occupied for three decades. This is all the less so as – deeping on the internal power struggle – China's foreign policy and international relations seem to exert greater influence on the basic trends and perspectives in the economy than they have at any time in the past twenty years. What is happening now is rather similar to the situation in the 1950s, when the strong socialist orientation in China's foreign policy and its international relations had a decisive impact on its social and economic growth. Therefore, in forecasting Chinese economic growth in the decade to come, we shall have to consider a number of hypotheses and assumptions that may or may not materialize according to a host of internal and external factors, and which serve as a political framework, or rather – in a wider sense – as a historical framework, of China's social and economic progress.

What are these assumptions? 1. In spite of considerable and co-ordinated efforts from inside and outside the country, China will not be deflected in the 1980s from the path that it chose to take in the 1950s, i.e. socialist transformation, a path that leads to a socialist society however winding and perilous is its course. Moreover, by rectifying left-deviationist errors, the socialist features of development may come into prominence, provided that rectification does not swing the country towards rightist deviations and antisocialism.

2. The power struggle within the country's leadership is unlikely to be resolved in the next few years on the one hand because of conflicts in the position and interests of the basic classes and strata that determine the internal balance of power, and on the other because of an unusually tense international situation. This is all the more unlikely to happen since considerable difficulties are being generated by the takeover of a new generation in control and management, preventing the present leadership from acting in co-ordination, drawing up a clear-cut and unequivocal programme of action including medium and long-term plans for economic development.

3. Since all groups are interested in bringing balance and dynamism to Chinese economic growth, compromises are the most likely to be reached in regard of economic development and policy. Since, on the other hand, the various trends and groups in Chinese leadership hold widely different views about basic trends of development, rational proportions and priorities in economic control and management, as well as about the basic course to follow in external orientation and resources, the compromises to be reached will be short-lived and temporary in character.

4. Compromises will mainly be made between the pragmatic and the realistic wings, the two groups that possess more or less thoroughly elaborated economic development plans also supported by economic analysis. Developments in the past 2–3 years indicate that, by their efforts to correct the grave errors committed in the past two decades and to enforce the principles of socialist development, the realists now command a larger and

wider support by the people than the prowest pragmatists, who are trying to advertise themselves as being capable of stepping beyond ideological fetters by 'liberating people's thinking'. How long the present situation will remain unchanged is something a number of interrelated factors will determine, the two most significant of them being future trends in world politics and the attitude of leading capitalist powers towards China.

5. Although the pragmatist group, which affects China's foreign political decisions most, are interested in increasing international tension, they tend to avoid situations that might lead to open confrontation between China and the Soviet Union. Others emphasize that the country needs a peaceful international atmosphere if the 'four modernizations' are to be completed successfully. Thus it looks improbable that a relatively close political and – even less likely – a military alliance will be formed between China and the US or other imperialist powers, or that these powers will give increasing assistance to modernize China's war industry and army.

After this brief introduction we shall proceed to the results of my estimates and calculations related to the expected growth rate of the Chinese economy in the coming decade. We are only going to describe one of these calculations, the one that appears the most likely to materialize according to my present knowledge and assumptions. This version already incorporates the utterances of self-criticism and hints at further 'readjustment' that have been made by several leading figures over the last six months, and which have been given the widest press coverage.

The basic figures for forecasting Chinese economic growth in the 1980s, as well as the results obtained in the estimates for 1985 and 1990, are contained in the table attached to the present paper. The figures for 1949, 1957, 1965 and 1980 are taken as fact and have been taken directly or calculated from data considered officially published in China. In line with the set-up of the table, we divided the decade examined into two five-year periods, made first the forecast for population growth, proceeding to industry and agriculture, and arriving at estimates for major synthetic indicators in terms of value. Finally we attach a brief analysis of foreseeable trends in foreign trade and credit transactions at current and constant prices.

Population growth

China's population – excluding Taiwan's 18 million people – was 982 million at the end of 1980, i.e. a total of one thousand million inhabitants occupied "both sides of the Taiwan Straits". The annual rate of natural increase was successfully reduced from 23 to 11 per thousand in the previous decade (a spectacular achievement), however, in spite of increasing propaganda for family planning and administrative measures, no further drop in the growth rate has been registered in the past two years. The plans had originally been to achieve an annual drop of one per thousand between 1978 to 1985, i.e. from 12 per thousand in 1978 to 5 per thousand in 1985. Some say it was as irrealistic an objective as many others that the draft economic development plan up to 1985 contained when it was adopted early 1978. It is nevertheless reasonable to make efforts to keep the

annual natural population growth within 10 million, the growth rate reckoned with in the forecast.

Despite an average annual rate of 10 per thousand, an effective growth rate of 20 per thousand may be expected with the active population in the coming decade, since the cohors born between 1966 and 1975 will enter working age during this time. Consequently, the share of the economically active population within the total will rise from 42.3 per cent in 1980 to the estimated figure of 44.2 per cent in 1985 and 46.4 per cent in 1990. Finding jobs for this population will continue to pose problems to the country's leadership as the productive sector can only absorb a maximum annual increment of 1.7 per cent in workforce. The figure is low chiefly because of agriculture whose low absorption rate is under 1 per cent annually, if full employment is being considered. Therefore villages will continue to have hidden unemployment and underemployment. To eliminate unemployment in cities it will be necessary to achieve annual growth rates in workers and other employees of 3.5 per cent up to 1985 and 3 per cent in the five-year period up to 1990, where the figures for the state sector should be about 2.4 and 2.1 per cent, and those for collectively owned companies and institutes about 7.0 and 5.2 per cent. (Employees in the latter type of economic units earn wages or salaries about two thirds of those earned in state sector companies.)

Industrial production

The first half of the coming decade is likely to see the continuation of the policy of 'readjustment', given considerable impetus last year. This involves a slower growth rate in the investment and energy-intensive heavy industry and a livelier pace for development in the light industry. Also, the 350,000 or so existing industrial plants will be gradually updated rather than new establishments built. Heavy industry is likely to regain impetus in the second half of the decade, though unable to catch up with light industry, bound to slow down from the break-neck pace in first half of the decade. In the second stage, reconstruction of some metallurgical, chemical, petroleum and coal-mining establishments built with foreign aid will be completed and some new ones built.

The estimates regarding total industrial output and that of the two basic sectors of industry are as follows:

	Between 1981–1985	Between 1986–1990	Between 1981–1990
		%	
Average annual rate of growth in industry, of which	6.0	7.4	6.7
in heavy industry	3.1	7.0	5.0
in light industry	9.1	7.9	8.5

The figures indicate that light industry is expected to grow faster than heavy industry at a rate of 2.94:1 in the first five years, 1.13:1 in the second five-year period and 1.70 : 1 over a period of ten years up to 1990. At no time in Chinese history has such priority been granted to light industry for so long a period. If the forecasts materialize, the share of heavy industry within industrial production is to sink from 53.3 per cent in 1980 to 46.1 in 1985 and to 45.0 in 1990, approaching the 47 per cent figure characteristic of the first Five-Year Plan.

Workers and other employees in industry are expected to grow in number at an average annual rate of 3.5 per cent, i.e. an absolute increase from about 50 million in 1980 to approximately 70 million will occur in ten years' time. The additional 20 million will be shared roughly half-and-half between state owned and collectively owned industry. This means that almost half of the expected growth in industrial output will be attributable to an increase in workforce.

The per capita figures for major industrial products have been estimated to reach the following values by 1990:

hard coal and lignite	– 682 kg
mineral oil	– 165 kg
electric energy	– 409 kWh
crude steel	– 50 kg
cement	– 136 kg
paper and cardboard	– 9 kg
sugar	– 5 kg
cotton fabrics	– 20 m

Agricultural production

An increase in the growth rate of agriculture is a primary goal of the current policy of 'readjustment.' This basic sector of China's economy was utterly neglected during the 20 years of 'self-sufficiency'. There has been a 3.7-fold increase in the country's agricultural output in the past thirty years; however, the figure for the 20 years from 1958 to 1977 is only 70 per cent. The average annual growth rate for the period 1950–1979 is 4.5 per cent, while that for 1958 to 1977, only 2.7 per cent. Cereals production grew 2.9-fold in the three decades examined, while only 1.9-fold in the 20-year period mentioned, yielding average annual growth rates of 3.6 and 2.2 per cent, respectively. This means that the annual growth rate of cereals production between 1958 and 1977 only exceeded the natural increase of population of 1.9 per cent by a mere 0.3 points.

What adds extra significance to agricultural progress in China is the fact that over 80 per cent of its population live in rural settlements, where 73 to 74 per cent of the economically active population (totalling ca. 415–420 million), i.e. about 310 million

people are employed. About 10 million out of these 310 million are employed non-productively, about 30 million pursue industrial occupations (10 million in commune-run companies, 20 million in brigade-level units and workshops), another 20 million are indirectly concerned with farming proper (construction, transport, water management, fishing, forestry, etc.). Thus the number of workforce employed in plant growing and animal husbandry was around 250 million in 1980, a figure that might grow by a maximum of 10 million, i.e. to 260 million, by 1990.

To assess the prospects of growth in agriculture in the 1980s one must take as a starting point the effective potentials inherent in raising crop yields in plant growing, in particular increased yields in cereals production. Yields are particularly important since even large sums of money could increase arable land by insignificant proportions only, and sowing area cannot be extended considerably for objective reasons, either. It is a realistic estimate to say that the about 160 million hectares of today's sowing area of less than 100 million hectares of arable land will have grown to about 175–180 million hectares by the extending of manifold sowing area until the end of the decade. In three-fourths i.e. about 120 million hectares, of the actual sowing area we can find cereals production, which means that the average yield per hectare figure for cereals has been 2.6 to 2.8 tons in the last two years. Given a more or less unchanged sowing area and envisaging considerable improvements in agrotechnology, the yield per hectare figure for cereals is expected to grow 3.1 tons in 1985 and to 3.75 in 1990, which indicates an average annual rate of growth in output of 3.5 per cent in the first half, 3.7 per cent in the second half of the decade, with an overall figure of 3.6 per cent for the 1980s.

The expected total agricultural production value – expressed at constant 1970 prices – has also been derived from foreseeable trends in cereals production. Over two-thirds of China's agricultural output was given by plant growing and about 42–45 per cent by cereals production at the end of the 1970s. Animal husbandry barely contributed 13–14 per cent. In making this prognosis we assumed that the share of cereals will continue to drop in agricultural output, with figures of 38 and 34 per cent in 1985 and 1990, respectively. This is expected to be accompanied by an ever larger share of animal breeding, farming industry and other rural ancillary occupations. The growth of overall agricultural production is expected to reach an annual average of 5.6 per cent in the first half of the decade, 5.9 per cent in the second half, and 5.7 per cent for the decade as a whole. During this time cotton production will grow by more than 50 per cent and the stock of pigs by almost 50 per cent, enabling the raising of cotton fabrics provision from an annual 12 m/head at present to over 18 m/head by 1990, and today's annual average of 12 kg of pork per head of population is expected to reach the 17–18 kg figure by that time.

National income and gross domestic product

China's national income – expressed at constant prices – has grown almost 7.7 times from the figure thirty years ago, implying an average annual growth rate of about 7 per cent. This also means that in these three decades it took slightly more than ten years for national income to double. The considerable differences and fluctuations in the actual rate of growth in various periods have been mainly due to political reasons. Similar irregularities have been experienced – and for much the same reasons – in the use of national income over the past thirty years: for 7 years the rate of accumulation stood at under 20%, for 10 years it was between 20 and 25 per cent, for 13 years over 30 per cent, and in 1959 it approached 44 per cent.

The expected growth of national income has been calculated on the basis of foreseeable trends in the net value of industrial and agricultural output in the coming decade, assuming a drop in the net share of both, and a substantial rise in the net share of other sectors of the economy. The resulting figures for China's national income at constant 1970 prices are 363 billion Yuan in 1980, 480 billion Yuan in 1985 and 660 billion Yuan in 1990, representing average annual rates of growth of 5.9 per cent for the first years, 6.6 per cent for the second period, and 6.3 for the whole decade. Calculated on the basis of the current rate of exchange of 160 Yuans = US $ 100, per capita national income is expected to reach $ 288 in 1985 and about $ 375 in 1990. The share of industry in national income will stay at the present level (46 per cent), that of agriculture will probably diminish from close on 30 per cent in 1980 to 23 per cent in 1990, while other sectors are to increase their shares from the present 24 per cent to 31 per cent during the same period. The accumulation fund, which stood at 30 per cent of national income in 1980, is expected to go down to 25 per cent by 1985, but – owing to livelier investment in the second stage – is likely to reach about 27 per cent by 1990.

Data on China's gross domestic product have been published (in dollars) only in recent years. It has been revealed that there is only about 15–16 per cent difference between China's national income and GDP, pointing to underdevelopment in the service sector and low rates of depreciation. Thus while the 1980 GDP figure was about 270 billion dollars, i.e. $ 275 per head, the figure may rise to 360 dollars per head in 1985 and 480 dollars in 1990.

Foreign trade and credit operations

The turnover of China's foreign trade in 1980 exceeded 35 billion dollars at current prices. The share of exports stood at almost 17 billion dollars, imports at 18.2 billion dollars. The foreign trade balance showed a deficit of 1.2 billion dollars in 1980, an improvement on the – 2.1 billion – dollar figure in 1979.

When attempting to make a forecast on China's foreign trade it is advisable to consider the goals and objectives of the current policy of 'readjustment'. It is laid down in this policy that while active foreign trade links are to be maintained, the future rate of

growth in this sector should be more modest than before, and above all the country's deficit should be kept as low as possible. However, the actual goals set in both foreign trade and credit operations are as yet only known to be initiated. Considering all this, we assumed in the forecast an average annual growth rate of 16 per cent at current prices, or 9 per cent at constant prices, for foreign trade. That means that we expect a fairly low rate (7 per cent annually) of inflation. The average annual growth rates of exports and imports in the two five-year periods are contained in the table below:

		1981–1985	1986–1990
		%	
Exports	– at current prices	14.3	17.4
	– at constant prices	7.3	10.4
Imports	– at current prices	17.8	14.3
	– at constant prices	10.8	7.3

This shows that while China's trade balance would stay in the red in both halves of the decade, the ratio between deficit and exports would improve, i.e. decrease in the second stage. While in the first five years the balance of payments deficit of 19.3 billion dollars at current prices and 16.1 billion dollars at constant prices against the total turnover figures of 293 billion dollars and 240 billion dollars, respectively, would amount to 14.1 per cent and 14.4 per cent of the value and the volume of five years' total value of exports, the relevant figures for the second five years are expected to be 9.6 and 10.9 per cent, with deficit figures standing at 28.1 billion dollars and 19 billion dollars against a total turnover of 613 billion dollars at current prices, or 367 billion dollars at constant prices. Deficits of this order can be handled by ordinary credits or the method of deferred payments often employed in foreign business, obviating the need for major government or banking loans. This, however, does not rule out the possibility that the Chinese authorities may – under advantageous delivery and payment terms – wish to raise further trade or bank credits guaranteed by governments in major deals. On the other hand it is unlikely that China will embark on a deliberate policy of running the country into serious debt in the decade to come. It is a realistic estimate that the present debt of about 3–4 billion dollars will go up to 10–12 billion dollars (at constant prices) by 1985, and reach 13–16 billion dollars in 1990. This means that only one-third of credit potentials secured for China in recent intergovernmental agreements and credit deals will be exploited. In this context it is, however, absolutely necessary to remind the reader that the entire prognosis has been built on certain political assumptions and hypotheses, and that any alteration of considerable size in any of these may about modifications in China's economic policies – as was the case on more than one occasion in the country's history – that will render illusory any kind of economic planning or forecasting based on economic considerations.

APPENDIX

China's economic growth between 1949 and 1990 in key volume and value indicators

Denomination	Unit of measurement	Facts				Estimates	
		1949	1957	1965	1980	1985	1990
A) PHYSICAL INDICATORS							
I. Population and employment							
Total population	millions	542	646	755	982	1040	1100
of which: urban	millions	57	99	115	122	130	150
rural	millions	485	547	640	860	910	950
Total economically active population	millions	244	305	320	415	460	510
of which: urban	millions	24	45	50	62	72	87
rural	millions	220	260	270	353	388	423
Total productively employed	millions	237	290	300	380	415	450
of which: in industry	millions	12	20	30	50	60	70
in agriculture	millions	215	255	250	300	315	330
in other productive sectors	millions	10	15	20	30	40	50
Total workers and employees	millions	10	35	50	104	125	145
of which: in state-owned companies	millions	8	30	40	80	90	100
in cooperative companies	millions	2	5	10	24	35	45
II. Output of major products							
a) Industrial products:							
hard coal and lignite	million tons	32	130	270	620	660	750
crude oil	million tons	0.1	1.5	11	106	125	150
electric energy	billion kWh	4.3	19	60	300	350	450
crude steel	million tons	0.2	5.4	12	37	40	55
rolled steel	million tons	0.1	4	9	27	30	45
cement	million tons	0.7	7	16	80	100	150
fertilizers (effective substance)	million tons	0.0	0.6	1.5	12.3	20	32
paper and paper boards	million tons	0.2	1.2	3.6	5.4	7	10
sugar	million tons	0.2	0.9	1.5	2.6	4	6
cotton cloth	billion m	1.9	5.1	6.5	13.5	18	22
b) Agricultural produce:							
cereals (incl. soy-bean)	million tons	113	195	195	318	375	450
raw cotton	million tons	0.4	1.6	1.7	2.7	3.2	4
hogs livestock (by the end of the year)	millions	58	146	168	305	400	480

Denomination	Unit of measurement	Facts			Estimates		
		1949	1957	1965	1980	1985	1990
B) VALUE INDICATORS (at constant prices in 1970)							
I/1. Gross industrial output	billion yuan	11	61	121	499	668	955
of which: heavy industry	billion yuan	2	27	60	265	308	430
light industry	billion yuan	9	34	61	234	360	525
I/2. Net industrial output	billion yuan	5	24	45	170	220	300
II/1. Gross agricultural output	billion yuan	42	79	86	163	210	280
of which: cereals production	billion yuan	24	41	42	68	80	96
cereals production	%	57	52	48	42	38	34
II/2. Net agricultural output	billion yuan	34	59	65	106	126	154
III/2. Other productive sector (net)	billion yuan	5	31	37	87	134	206
I/1+II/1 = Gross combined ind. + agr. output	billion yuan	53	140	207	662	778	1235
I/2+II/2+III/2 = Total national income	billion yuan	44	114	147	363	480	660
of which: share of industry	%	11	21	31	47	46	46
share of agriculture	%	77	52	44	29	26	23
share of other prod. sec.	%	12	18	25	24	28	31
Share within national income utilized							
of accumulation	%	13	24	23	30	25	27
of consumption	%	87	76	77	70	75	73
National income (160 yuan = $100)	billion $	28	71	92	227	300	413
Per capita national income	$	51	110	122	230	288	375
Gross Domestic Product	billion $	31	84	110	270	375	528
Per capita GDP	$	57	130	146	275	360	480
C) FOREIGN TRADE (At current prices, and allowing for 7% inflation a year for 1985 and 1990 figures)							
Total turnover	billion $	1.2	3.0	3.9	35.2	77	160
exports	billion $	0.6	1.6	2.0	17.0	35	78
imports	billion $	0.6	1.4	1.9	18.2	42	82
balance	billion $	0.0	+0.2	+0.1	−1.2	−7	−4
Per capita foreign trade turnover	$	2.2	4.6	5.2	36	74	145

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ЭКОНОМИКА КИТАЯ В 1980-ЫХ ГОДАХ (ПРОБЛЕМЫ И ПЕРСПЕКТИВЫ)

Г. ХИДАШИ

В первой части статьи автор дает краткий обзор существенных различий в оценке отдельными направлениями и группами нынешнего китайского руководства результатов и ошибок экономического развития трех прошедших десятилетий, а также в оценке экономического положения страны. На основании сообщений Государственного статистического управления КНР автор приводит важнейшие показатели развития, достигнутые китайским народным хозяйством в 1980г. Затем, во второй части статьи, исходя из некоторых политических предположений, автор сообщает свои расчеты и оценки предполагаемого роста китайской экономики в 1980-ых годах. Он оценивает демографическую ситуацию, ожидаемый рост промышленного и сельскохозяйственного производства, национального дохода и валового отечественного продукта (GPD) и, наконец, развития внешней торговли и кредитного оборота. По его расчетам, национальный доход на душу населения, составивший в 1980г. 230 долларов, к 1985г. может достичь 290 долларов, а к 1990г. — 375 долларов (при нынешней покупательной способности и курсе доллара).

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REVIEWS

I. HUSZÁR

PEOPLE IN DISADVANTAGEOUS (HANDICAPPED) SITUATION IN HUNGARY*

Those persons and families are considered to be in disadvantageous social situation whose possibilities to satisfy their needs, living conditions and possible way of life are significantly worse than those of the majority of society.

Disadvantages may manifest themselves in several dimensions: low income and consumption level, bad housing circumstances and living environment, low qualification and educational level, very difficult working conditions harmful to health, endangered bringing up of children, illness, physical or mental defects, disablement, special difficulties of elderly people, family-members with deviant behaviour – all these are manifestations and simultaneously also causes of these disadvantages.

The handicapped situation becomes especially grave if various disadvantages are cumulating, for example, low income, bad dwelling conditions, low qualification and deviant behaviour simultaneously occur within a single family, i.e., if a situation disadvantageous in several respects is developing. Similarly, the disadvantageous situation becomes especially grave if the family cannot surmount it permanently, i.e. if after their parents also the children remain in layers in disadvantageous situation. This also results from the cumulation of disadvantages in many cases.

Some aspects of the – in my opinion correct – approach to this social problem may perhaps be felt even from these few sentences.

A disadvantageous or handicapped situation means a system of equations with several variables, a function with many factors and I believe the commonly used word poverty is inapt for its characterization. The notion, more precisely, the pair of notions – disadvantageous situation and cumulated disadvantageous situation – introduced by sociologists and successfully applied in scientific investigations provides a more complete characterization of the social concerns and conflicts examined here. Disadvantageous situation and its changes, the mechanism of the linkage of disadvantages can not be investigated independently of the social system and of the process of economic and social development.

*The Hungarian Association of Sociology held a scientific conference on the investigation of social groups in multiple-disadvantageous situation on the 23rd and 24th of April, 1981. The opening paper was read by István *Huszár*. The present article is based on this paper. It was complemented by Rezső *Nyers*'s and Kálmán *Kulcsár*'s contributions.

Precisely on this account – and supported by historical experience – I do not believe in that the mitigation or elimination of disadvantageous situations will be subject to sociological investigations, political and social action only for a short time, yet. It is, however, a fortunate fact that in Hungary the cognition of social reality, a truer and fuller national self-recognition were promoted in the last two decades by numerous statistical surveys, sociological investigations and thus the mitigation of social tensions of such nature has become an integral part of our policy and practical work. Let us only mention in support of the above that in 1963 and 1968 the Central Statistical Office carried out a detailed income survey, connected with the micro-census, on income relations of the previous years, on the situation and composition of layers with low income. In December 1979 the Economic Working Panel of the Central Committee of the Hungarian Socialist Workers' Party discussed a document on layers in multiple disadvantageous situation which had been compiled on the basis of a wide-range preparation. Finally, I would quote a sentence from the Central Committee's resolution on the Sixth Five-Year Plan (1981–1985): "In social policy the greatest attention should be paid to improving the living conditions of families with several children, of pensioners with low income and of those in disadvantageous situation".

And still, we have some knowledge of the number and characteristics of those in disadvantageous situation only from special surveys and investigations. Thus, I have no possibility to examine overlaps of various disadvantageous situations, i.e. those in a multiple, cumulated disadvantageous situation. I have to mention, therefore, in advance, that the figures to be presented in the following must not be added, because a considerable part of those considered to be in a disadvantageous situation is likely to be the same in the individual dimensions.

Let us now consider the various disadvantageous social situations one after the other.

Characteristics of the disadvantageous situation

1. When defining the disadvantageous situation resulting from low income, two types of methods are used in statistical and sociological literature. One is the so-called absolute or normative, while the other the so-called relative examination. Absolute or normative examination is used when an income level is determined – at a certain date – that is sufficient to meet some minimum of human needs and those are considered "poor" whose income does not reach this level. In case of relative examination those are considered "poor" whose income considerably lags behind the average income and is lower than half or 40 per cent of the arithmetical mean or the median income. Both approaches are worth applying, since both say something relevant, but different about those with low income.

In order to see where we have started from let us look back to prewar Hungary a country with three million have-nots. We are in the fortunate situation that Mátyás Matolcsy, who later on had an ignoble role in the history of Hungarian politics,

estimated per capita incomes by social classes and layers for the economic year 1930–1931. With three social layers a per capita yearly income under 230 pengös, i.e. less than 63 fillers daily was stated; these were agricultural day-workers, agricultural labourers and peasants with small and dwarf estates of 1–10 yokes.* 3 million 600 thousand people belonged to these three categories amounting to 41 per cent of the Hungarian population at that time. These 63 fillers were sufficient to buy two kilos of brown bread, or one and a half litres of milk or little less than 20 decagrammes of fresh pork chop. Thus, it may be said with good reason that these layers lived under the subsistence level.

Of course, we cannot say that there were no families among them with higher income than the average of the layer and even less that in other layers, first of all in the working class with a yearly income of 376 pengös there could not be found lots of people living in great poverty, under miserable circumstances.

The income level of the same mass lagged far behind the national average of 534 pengös, thus amounting to less than half of it.

Examination by Central Statistical Office of family-household budgets began in the early 1960s and has been repeated every five years ever since then. These investigations cover all incomes of a whole year, those resulting from employment, just as social allowances in money, those resulting from household and complementary plots and other additional incomes. Of course, we cannot proclaim that these data are fully correct. It is likely that they reflect consequences of a secondary income distribution among the population to a relatively small extent. However, it may be safely said that as compared to similar data of the other countries our income data are fairly good. It may also be said that if these surveys on family incomes had not taken place then we would not have any idea of the size composition of layers with low income.

Table 1 shows the number and percentage within the entire population of persons belonging to the lowest income categories at the time of four income surveys.

The categories presented are, of course, not identical with those with problematically low income, I deliberately took no stand concerning the amount of "subsistence level", "poverty threshold" or "social minimum", since such questions may only be answered on the basis of thorough consideration. In Hungary such computations were made by the Central Statistical Office for 1968. Of course, the thresholds depend on the size and composition of families. As an example of computations made then I only mention here that in a family consisting of two adults and two children the poverty threshold of per capita monthly income was estimated at 620 forints and that of the socially acceptable minimum at 830 forints. It results from this that in 1968 about one million people lived under the former threshold and another one and a half million under the socially acceptable minimum standards. It must be added – in support of the relative, historical character of such normative examinations – that the thresholds mentioned are incomparably higher than the daily 63 fillers cited in the foregoing, i.e. not quite 19 pengös a month.

*1 cadastral yoke = 1,42 acres (Tr. note)

Table 1
Number of persons belonging to categories with low income and their percentage within the population

Year	Per capita income Ft	Population (thousands)	Percentage within the entire population
1962	– 400	1084	10.2
	400– 600	2243	21.2
	600– 800	2251	24.0
1967	– 600	1002	9.8
	600– 800	1513	14.8
	800–1000	1952	19.1
1972	– 600	374	3.6
	600– 800	561	5.4
	800–1000	956	9.2
	1000–1200	1331	12.8
1977	– 800	160	1.5
	800–1000	202	1.9
	1000–1200	362	3.4
	1200–1400	574	5.4

With prices rising, parallel with economic and social development also these levels have risen since then, of course. Still, data of the table indicate that the number and proportion of people in very difficult income situation have considerably decreased in "absolute" terms.

No decrease of such extent may be recorded if income relations are examined in relative terms. This is natural, since in this case those lagging behind the average are meant and even if incomes of those at or below the average are rising, nevertheless the lag behind the average may remain or even increase. In several developed capitalist countries an increasing number of those considerably lagging behind the average, i.e. poor taken in a relative sense, was stated in the last 10–15 years, despite increasing income levels.

A more favourable change may be experienced in Hungary. Namely, with some simplification one tenth of the population with lowest income – about one million people – may be considered in relative sense as people with problematic low income, because their average income level is less than half of the average. Since 1962 the average income level of the lowest tenth approached the average with some fluctuation, because it amounted to 39 per cent of the national average in 1962, and to 45 per cent of it in 1977. However, it must be added also here, that the data probably do not indicate a considerable part of secondary income distribution among the population.

Summing up we may say that in Hungary mass *pauperism similar to that before the liberation has ceased for ever.* Especially great progress has been achieved in the elimina-

tion of village pauperism following the agrarian reform, industrialization and the socialist transformation of agriculture. But, also the major progress achieved since the early 1960s is a direct consequence of socio-economic development. At the same time *it is also clear that families whose income is lower than the desired minimum are existing even at present.*

Who belong to the low income category? *Table 2* presents some data on this.

The table shows the composition of the layer with less than 1200 forints monthly per capita income – amounting to 6.8 per cent of the population in 1977 – and of the entire population of the country in a breakdown according to the social status of the heads of the household. It may be seen that *more than two fifths of this layer with low income consist of members of such households where the head of the household is a pensioner and a further almost 50 per cent consist of such ones where the head of the household is a worker or an agricultural manual worker.* The proportion of families of skilled workers is relatively low and that of intellectual families is insignificant.

Otherwise, data of the examination unambiguously indicate that one of the reasons for low income is that in these households the number of active earners is much less than the national average, or, in other terms: there are many such families where a relatively great number of children can be found, furthermore, where the wife or mother is no active earner, where dependants beyond retirement age, but still without a pension are living, where only one parent is bringing up a child or children and finally, where the family consists exclusively of pensioners.

It is also worth of attention that while between 1972 and 1977 income differences decreased in all respects – e.g. between the capital, other cities and villages, between social layers, what is more, even the lag of pensioners behind the average decreased

Table 2

Composition of those living in households with a monthly income less than 1200 Ft and in all households, according to the social status of the heads of the household (1977)

Social status of the head of the household	Composition of	
	households with per capita monthly income under 1200 Ft	the entire population
	percentage	
Intellectual	2.5	18.9
Skilled worker	10.3	29.1
Semi-skilled worker	19.9	13.7
Unskilled worker	15.8	6.4
Agricultural manual worker	10.0	9.2
Pensioner and dependant	41.5	22.7
Altogether	100.0	100.0

considerably –, relative differences between the income level of childless families as well as of families with one or more children remained unchanged, as it is indicated by Table 3.

2. Housing circumstances may be regarded so much unfavourable that they cause a disadvantageous social situation in two cases: a) if the physical state of the dwelling is bad, unhealthy or its equipment is very deficient; b) if the dwelling is smaller than what would be needed by those living there on good grounds, the dwelling density is great, or such persons are living together who should live in separate dwellings and have a claim on an independent dwelling, but do not have one, yet.

After the war considerable progress has been achieved in improving the housing conditions. Let us see only a few data. The number of inhabitants per hundred rooms amounted to 272 in 1949 and to 151 in 1980. 45 per cent of living rooms had floors of beaten earth in 1930, but only 3 per cent of them were such in 1980. The proportion of flats equipped with electricity only amounted to 27 per cent in 1941, while already to 98 per cent in 1980. The proportion of dwellings with piped water-supply was 9 per cent in 1949 and 65 per cent in 1980.

Despite this considerable development there still are unhealthy, congested dwellings with deficient equipment in small number, and there are relatively many families waiting for an independent dwelling.

Who are living in such dwellings? *Most unhealthy dwellings with deficient equipment may be found in villages and farmsteads* where mainly elderly people are living or agricultural labourers, unskilled workers of villages. Crowdedness is the greatest also in villages, 23 per cent of village households and about 15 per cent of city ones live under circumstances of crowdedness, with more than 2 persons per room.

Examined by social groups it may also be seen that *crowded dwellings are most frequent among those with agricultural manual occupation,* with about one third of them living with two or three other persons in one room; this percentage is only a bit smaller (31 per cent) among semi-skilled and unskilled workers.

As regards *crowdedness* the most definite difference may be found *according to the number of* children in the family. Almost one third of couples with children live in

Table 3
Per capita income level of households with children, in percentage of the income level of those without children

Year	No dependent child	One	Two	Three	Four and more
		dependent children			
1962	100	79	64	52	38
1967	100	80	67	53	40
1972	100	77	62	51	34
1977	100	75	62	50	34

dwellings of inadequate size, two fifths of parents bringing up their children alone and thus in a disadvantageous situation anyway, while with childless couples this percentage is only 4 per cent.

The lack of *an own dwelling,* involuntary living together with another family, crowdedness are, therefore, *characteristic first of all of young couples and even among them of young unskilled workers and agricultural manual labourers.* In 1978 11 per cent of households had no independent dwelling as yet. More than half of the Hungarian society build or buy a dwelling from own resources. This requires enormous efforts in terms of both money and working time, since most of them are building themselves. This lasts for years, takes more than ten years of their life and during these years they are in a disadvantageous situation in respect of consumption level and the total time spent in work even if their income is not low otherwise. Therefore, the activity aimed at solving the housing problem should be given many-sided preferences also further on.

Unfavourable dwelling conditions are in many cases aggravated by a disadvantageous environment, the lack of infants' nurseries, kindergartens, service institutions, etc. not to speak about poor, neglected settlement circumstances sometimes objectionable with good reason also from the hygienic aspect. This latter phenomenon may be frequently observed both in bigger cities and in so-called dwarf villages.

3. Another cause and consequence of disadvantageous situation is *low school qualification and the lack of qualifications.*

The achievements in the field of education after the war are indicated among others by the fact that in 1941 only 15 per cent of the population aged 15 or over completed 8 classes at school, while in 1980 already 66 per cent.

However, if we wish to delimit those in especially disadvantageous situation in contemporary Hungarian society from the viewpoint of qualification, then we have to think first of all of those having not completed 8 classes of the primary school considered as a basic requirement at present.

In the age group of 20–24 years (where the acquisition of this qualification may be assumed even in case of a delay of one or two years or over-age) the proportion of those not completing the 8th class still amounted to 24 per cent in 1960, to 9 per cent in 1970 and decreased already to less than 5 per cent by 1980. However, the fact that there are still several thousands of children in every generation who do not acquire this basic school qualification is a serious problem, because they are very likely to belong to those in disadvantageous situation in their adult age also in many other respects.

Secondary analyses of income surveys of the Central Statistical Office showed that young people with less than 8 classes' qualification may be found first of all in families with low income, in those of unskilled workers and agricultural labourers.

The education of a part of gipsy pupils causes especially serious problems. This is proved by the fact that about one third of pupils in primary schools repeating a class, impossible to give any mark or over-age are gipsies. 73 per cent of gipsy children cannot complete 8 classes of the primary school during 8 years. (A part of them attains this later on.) There are complex reasons for this. A mother tongue other than Hungarian, the

special culture of gipsy families still living under traditional circumstances (who, however, do not mean the entirety of gipsies), low income and bad dwelling conditions of these families, the lack of regular employment, eventually negative attitude or prejudice on the part of pedagogues and schoolmates have all their role in this.

However, the problem of disadvantageous situation must not be identified with that of gipsies. According to a survey on gipsies made by the Research Institute of Sociology the number of gipsies amounted to 320 thousand in Hungary in the early 1970s. In 1971 69 per cent of them lived on a per capita monthly income under 800 forints that had been determined as the socially acceptable minimum two years earlier. However, these 220 thousand gipsy persons do not even reach one tenth of the 2.5 million people living on an income less than 800 forints per month in 1968. The situation of a part of the gipsy population still requires special attention, because their way of life may especially slow down their social adaptation.

Those *attending auxiliary schools* mean quite another problem. If they complete 8 classes there, then they will not belong to the aforementioned 5 per cent who do not complete 8 classes of the primary school. At present 3.2 per cent of the population of school age (in the school-year 1978–1979 36.704 pupils) attend these schools. Investigations made in auxiliary schools in Budapest indicate that a considerable part of those learning there have no mental defect, but, either for genetic reasons or because of unfortunate living conditions in their infancy, they possess relatively poor abilities or were simply sent to an auxiliary school instead of a normal one because of an error of classification, which is, unfortunately, not a rare case.

We also know from the same investigations that among pupils of auxiliary schools there are a great many children of unskilled workers.

However, it is sure that having attended an auxiliary school involves some social disadvantage as compared to the normal primary school, even if we know that a considerable part of those having completed auxiliary school hold their own at their work place, many of them learn also some trade.

4. Beside having not completed the 8 classes of the primary school another characteristic form of appearance of disadvantages in childhood is being endangered because of various reasons. According to latest data about 240 thousand children – 9 per cent of those aged 0–19 – belong to the scope of attention and care of the agencies for the protection of children.

The number of children under state care (tutelage) in corresponding institutions *(Tr. note)* amounted to 33.160 in 1979. They are coming in disproportionately large numbers from families with unskilled manual occupation and low income. According to a survey made in Budapest, in 1971 73 per cent of the heads of such families had a manual occupation, another 20 per cent were pensioners or other persons without earnings and only 7 per cent of the heads of family had an intellectual occupation. Before they were taken into state care 92 per cent of them had lived in households with a per capita monthly income under 1000 forints. Though taking into state care (tutelage) solves the acute problems, it becomes a source of new problems and disadvantages in the longer run.

It is, namely, well-known that children having spent a longer period under state care are adapting to society with great difficulties later on, after the cessation of state care.

5. Having examined disadvantages of the youth, let us now see the *disadvantageous social situation arising in the old age.* Old age alone does not yet mean any social disadvantage, but an old person will get into a disadvantageous situation if a) his/her income after retirement lags far behind that of those in working age; b) in consequence of a deterioration of his/her health condition he/she is unable to look after himself/herself properly or at all; c) he/she becomes lonely because of having no relatives or friends to maintain good human relations with.

The number of elderly people requiring some kind of care, support or financial assistance is estimated at about one million. The form of rapidly increasing institutional care meaning the best solution at present – social care – is extended to relatively few, about 84 thousand, old people. Therefore, looking after elderly people remains first of all the task of the family even at present. Families are fulfilling this task if they can and if there is any family member around the old ones at all who is able to look after them.

6. The disadvantageous situation of the sick and the disabled is well-known. The number of disabled pensioners under retirement age is 172 thousand in Hungary. Two thirds of them are men. The most frequent reasons of disablement are, beside congenital malformations to be explained partly by genetic reasons, illnesses of the circulatory system, accidents and poisoning, illness of the bony and muscular systems, of the interstitial tissues, diseases of the respiratory system, mental disorders. The frequency of diseases of the circulatory system, first of all of heart infarct impairs, therefore, not only mortality to a considerable extent, but makes a great many people disabled or unable to work at a relatively young age. Obviously, to investigate possibilities of prevention is a task of primary importance. But, it is not an insignificant issue, either, how the rehabilitation of the disabled could be promoted.

7. Finally, *deviant behaviour* or *disturbances of social adaptation* also belong to the factors involving disadvantageous social situation. In this group first of all four problems should be discussed: neurosis, already mentioned, suicide, alcoholism and crime. A neurotic or an alcoholic or a condemned criminal in a family makes not only his own social situation but also that of the whole family disadvantageous. Therefore, the number of those disadvantageously affected by them is about three- or fourfold of that of the effective deviants.

The following data give some information about the frequency of these forms of behaviour:

– The number of neurotics is about 120 thousand according to the records of the relevant institutions; in lack of reliable data concerning the previous period we cannot tell whether their number has really increased in the last decades. Besides, the increasing number of such ill people may reflect also the development of health institutions looking after them.

– The estimated number of serious alcoholics is more than 150 thousand; all signs indicate that their number has been growing for decades, since both the per capita

consumption of alcoholic beverages and the number of deaths in consequence of the atrophy of the liver presumably due to alcoholism are increasing.

– The number of suicides amounted to 4.770 in 1979, to 3.5 per cent of all deaths, that is, in Hungary every 29th man dies in consequence of suicide; this figure is one of the highest in world-wide comparison.

– As regards crime the image is more favourable, because the number of condemned persons was more or less stagnating in the 1970s, it amounted to 65–70 thousand yearly in the second half of the decade, but only less than 30 thousand of them were condemned to imprisonment and even out of these persons only about 5 thousand to a term exceeding one year. Thus the frequency of crime is relatively favourable in Hungary as compared to that in other countries.

Who belong to this group? We have no exact knowledge of the social distribution of neurotics, but all the other three phenomena are more frequent in unskilled layers with low income and qualification. This may warn us that deviant behaviour might be also a consequence of a disadvantageous situation in another respect.

On the cumulative (multiple) disadvantageous situation

There are thus varying types of disadvantages, handicaps in society that may be attributed to different reasons. Perhaps I succeeded in making perceptible as well that, on the one hand, various primary disadvantages may in themselves only be interpreted in their own dimension and it is by no means negligible how society evaluates the given dimension from the viewpoint of the whole of social life.

That is, on the other hand, a disadvantage, a handicap may be interpreted and judged only in social and historical concrete terms even in its individual, primary form of appearance, with certain limitation, namely, apart from genetic and serious health damages. In other words: socially interpretable and appreciable disadvantages usually do not appear alone, but linked to other social disadvantages. Thus a socially disadvantageous situation always means some linkage of disadvantages to a greater or smaller extent. The base of comparison of social disadvantage is always the satisfaction of actual social and historical average needs, and in this respect social advantages and disadvantages are not simply complementary to each other. *Thus, social disadvantage, social handicap always means isolation and deprivation from meeting socially accepted average needs.*

The fact that social disadvantage can not be interpreted in itself, since it is linked with disadvantages of another type in many cases, does not yet mean an automatic cumulation of disadvantages, a cumulative (multiple) disadvantageous situation. The existence of certain disadvantages may be compensated by the lack of other groups of disadvantages, eventually by certain advantages. The old and sick are in a disadvantageous situation as compared to the young and healthy, but this disadvantage may be considerably mitigated by a favourable financial situation or income level. Intellectuals at the start of their career with low income and no dwelling might in several respects lag behind the

socially acceptable level of consumption and satisfaction of demands, eventually even considerably, but, owing to their high qualification they have good chance to make up for this disadvantage later on.

There are many cases, though in lack of corresponding surveys we do not exactly know how often, when disadvantages are cumulating. E.g. if an elderly and sick person has a bad dwelling and low income, too. If family members have low school qualification, thus also low income and one or more of them are imprisoned or alcoholic, then children are in an endangered situation. If a person working hard manually, eventually under unhealthy working conditions becomes an alcoholic, then the consumption pattern of the family becomes distorted, not even the satisfaction of some primary needs of family members – first of all children – is ensured, the children will not even complete 8 classes of the primary school and so forth. In such cases we speak about a multiple disadvantageous situation or handicap.

That is, we *may speak about a cumulative disadvantageous situation if the linkage of social disadvantages is not compensated by advantages of another type, and the cumulation of disadvantages generally impedes the individuals, social groups in satisfying accepted average needs.*

Since social disadvantage is a societal problem even alone and may be a source of individual and societal tension, it is much more so when cumulative, multiple disadvantageous situations come into being. Of course, from all this it also follows that disadvantageous situation, in general, but especially the groups in multiple disadvantageous situation can only be examined and interpreted in the complex framework of social structure, since cumulative disadvantage may objectively cause to form a special layer.

It is on these grounds that the question may be answered, too, why the examination of the layer in multiple disadvantageous situation has become topical in Hungary precisely in the 1970s. Namely, the fundamental reasons are to be sought after in the transformation of our social structure and – however paradoxical it may seem – the coming to the fore of problems of multiple disadvantageous situation is an outcome of the country's social development. Here also the specific paradox often experienced in Hungarian society may be met that certain problems become sharply illuminated precisely when there is already some hope to solve them successfully.

In this connection I should like especially to emphasize the role of four factors. Firstly, the existence of antagonistic class contradictions had resulted for a historically long time in that fundamental parting lines of the social structure were to be found along these class differences and in this way the cumulation of advantages and disadvantages was connected with class position. The large-scale cumulation of disadvantages, powerful deprivation drew parting lines within the inner structure of oppressed classes. The elimination of class boundaries increased the relative importance of the inner parting line in the structure of society.

Secondly: in the period of the revolutionary transformation of society the basic rearrangement of social structure, considerable social restratification affecting about 80 per cent of the entire population primarily determined the development of social structure.

Previous disadvantages and advantages largely became then relative and changed. Consolidation of the new social structure, the necessary slow-down of large-scale mass movements brought parting lines within the structure of society to the fore.

Thirdly: the radical development of health and social services, a considerable raising of the educational level of the population and the overall, large-scale rise in living standards to be massively felt from the mid-1960s on until the late 1970s considerably raised the level of satisfaction of socially accepted average needs as compared to the earlier period.

Finally, fourthly: during the last 15–20 years the strict linkage of various types of inequality generally has weakened, the sphere of compensation possibilities has widened. Sociologists express this process by saying that the ratio of inconsistent social status considerably increased within the entire population. Namely, the given social situation of an individual or family is not permanent for their whole life or even for a very long time but possibilities of improvement are open and individual desires, goals and plans must not be given up in advance. In the life of individuals and especially in that of families good and bad as well as advantageous and disadvantageous positions and situations are largely mixed up. And, in a social structure where a considerable part of the population is characterized by inconsistencies, the cumulation of advantages and disadvantages appears especially sharply.

Perspectives and tasks

The future development of multiple handicapped situations is *very difficult to forecast* for several reasons. Difficulties are caused by the relatively narrow scope of scientific information, in addition to the lack of proper methods of societal forecasts. It is a similar problem that forecasts of this type would also assume the existence of specific and long-term forecasts, eventually plans of the economic sphere. Though long-term planning is rapidly developing we have not yet reached the level that social forecasts of such nature could already provide a reliable basis for outlining the perspectives of development. Finally, among the causes bringing about multiple handicapped situations also such ones may be found whose effects can not at all be forecast, or only within very wide limits of error.

Parallel with the increase of per capita *income* it may be realistically expected that the number of families where the satisfaction of needs considered primary means a problem at present will further decrease. This process will be promoted by raising family allowance for those with many children and low pensions, and by preserving their real value with an increasing price level, respectively. As against this, the fact how much the average income of the lowest tenth of the population will lag behind the national average largely depends on incomes policy and on the progress we can make in the differentiation of earnings to make them better depend on performances. It may be taken for granted that the housing situation will improve and ever fewer families will live in unhealthy, deficiently equipped and congested dwellings, what is more, we may also hope

that the time new families or young couples have to wait until they obtain an independent dwelling will gradually shorten. In this latter field housing policy has an important part.

Various investigations and research findings indicate that while the share of those not completing 8 classes of primary school is continuously diminishing and has developed rather favourably by the early 1980s, there exists a part of the population that reproduces this situation in a concentrated manner first of all for reasons connected with the way of life of the family. Since low school qualification may also be accompanied by further disadvantages (unfavourable working conditions, low earnings, etc.) great efforts have to be made in order to diminish the reproduction of this layer.

The situation of those attending auxiliary schools may be separated from this only partly. Here the intervention possibilities of society may be made promising since a considerable part of pupils attending auxiliary schools get there because of a family environment with little stimulus, neglect of children and bad behaviour, respectively. These circumstances may be improved through institutional and societal efforts, thus a considerable part of these children will not necessarily get into a multiple handicapped situation.

A specific source of the reproduction of multiple disadvantageous situation is the socially endangered situation of children and that a part of such children are under state care (tutelage). We have to reckon realistically with that the share of children living under state care – this amounts usually to 2 per cent of a generation – will not be much lower around 2000, either – first of all because of the development of the ratio of layers living in subculture as well as the increasing volume and efficiency of social care. Such children are a potential source of those getting into multiple disadvantageous situation.

On the basis of international – and also of domestic – experience it can not be expected that the consumption of alcoholic beverages would diminish to a considerable extent, what is more, it would be a great achievement just to stop further growth. At the same time no decisive turn may be expected in the cure of alcoholics, either, though the extension of care and its rendering more efficient are promising several possibilities.

Similarly, it can not be hoped that *neurosis* would considerably diminish but some progress might be achieved in its treatment, thus a greater part of patients could be led back to the family and the work place after shorter hospitalization and by better organized rehabilitation than is the case at present. In this way it could be achieved that such diseases cause less social disadvantages both for the sick and for their families, thus the development of multiple disadvantageous situations could be considerably diminished.

We have no proper basis for forecasting the future development of *crime*. Hungarian experience up to now indicates that the decrease of crime has not kept abreast of the development of social relations and the improvement of financial conditions. The development of crime has been stagnating for some longer time already. In countries economically more developed than Hungary crime usually did not decrease but rather increased parallel with the rise in living standards and school qualification. We may venture the

restricted statement that the ratio of those affected by crime as well as that of families and young people endangered by it will not change.

We have seen in the foregoing that the share of elderly people among those in multiple disadvantageous situation is rather high. Since in the longer run we have to expect that the share of elderly people may even reach 25 per cent of the population after 2000, we are faced with such a social policy problem whose lasting and reassuring solution may be imagined only with an increased and socially better supported undertaking of responsibility and burdens by the family. It will, furthermore, depend on the gradual creation of an institutional system easing the life of elderly people, ensuring the accommodation of single, helpless elderly people in adequate institutions.

It may be seen that a part of the causes bringing about multiple disadvantageous situations will always exist. Thus, for example, growing old is a natural concomitant of human life, disadvantages resulting from it cannot be eliminated by society, at most their enduring may be made easier. In the course of the reproduction of multiple disadvantageous situations the role and weight of causes and factors creating such a situation are continuously changing just as is the composition of the layers concerned. Even with the scientific elaboration of the problems and uncertainties of societal forecast in view we may *say that the multiple disadvantageous situation will exist as a problem in Hungary also in the decades to come, but the composition of layers in such situation as well as the role and weight of factors bringing it about will be different.* It may be expected that multiple disadvantageous situations will emerge in a partly different manner two decades hence from what they mean at present.

In *influencing* multiple disadvantageous situations by the society we should start from the fact that in such situation societal and economic determination are everywhere to be found, but they are considerably motivated by characteristics and behaviour of the individual as well. Therefore, supporting families and layers in such situation is simultaneously the task of the state and of the society. It requires also from those concerned that they raise an active claim to emerging from the disadvantageous situation and necessitates also participation of the narrower environment at the working and dwelling places and of social agencies. Restriction of the reproduction of multiple disadvantageous situations may be efficient especially if young generations were better supported, their education furthered and their cultural development made easier. Similar international experiences indicate that supporting this layer cannot be spectacular, but if we wish to achieve permanent results, it requires great endurance and a long time. At the same time the assistance rendered to this layer requires also the greatest tact. Any gesture should be avoided that might diminish the active participation of those concerned in their own rise.

A part of the tasks connected with multiple disadvantageous situations concerns first of all *scientific research.* By now we possess satisfactory knowledge of the individual societal disadvantages and their order of magnitude. At the same time we have little knowledge of the mechanism of connections between these handicaps and of layers in multiple disadvantageous situation. Research activity in this direction is just about to start.

Another problem is that of approach to the multiple disadvantageous situation. I am convinced that the situation of those concerned must not be dealt with separately. It is the development of the society as a whole that has to be considered. What is more, restriction and prevention of the emergence of cumulative disadvantageous situations will be really successful through effects indirect from this viewpoint.

However, all this is already connected also with economic and societal practice. Certain primary disadvantages may be mitigated and compensated by health and educational measures, social monetary allowances. But, at present there is no such complex system of social (welfare) policy tools available that could restrict the reproduction of multiple disadvantageous situations. It is necessary therefore not to formulate "campaign tasks", but to deal with the problem of those in multiple disadvantageous situation as a structural contradiction necessarily concomitant with the development of the society also in the longer run. That is, beyond the fields of social (welfare) policy to be developed and the system of tools serving them also the societal policy weight of these problems has to be reckoned with.

I am telling all this not only because it would be illusory to start fast and large-scale action in view of the present situation of the national economy and of the possibilities largely determined by the frameworks of the 6th Five-Year Plan for 1981–1985. Questions have been raised and it might be asked whether it is topical to discuss these problems now. I am convinced that it is, because – on the one hand – a more precise societal and national self-knowledge urges for the elaboration of truer, more correct – and very much needed – concepts. This surely requires some time. On the other hand, we are not condemned to idleness even at present. Certain political orientation adequate to our present – no more little – knowledge has already been formulated. Thus it may only be approved that it is a minimum requirement to preserve the real value of low pensions and of the family allowance of those with many children. In this field also further progress has to be made. Obviously, it should be examined how the possibilities of local councils could be widened for the occasional or regular social assistance to individual families or persons on the basis of special considerations.

As regards the housing situation a gradual – but only slow and time-consuming – improvement may be reckoned with. Efforts should be concentrated on the mitigation of problems of those in especially difficult situation – young families with children – through the further correction of building and housing management conditions.

Another sphere of action is the "building of networks", being less expensive but requiring thorough consideration. I should like to call attention to the importance of the social, family care and mental hygienic networks. All this has to be amalgamated, after all, into a social policy concept that makes state tasks easy to survey in the field of social welfare.

Finally, I should like to indicate that up to now I have spoken first of all about tasks for the state and ways of solution of state character, but this does not mean at all that the activity and responsibility of societal organizations, movements, families and individuals is not needed. On the contrary, it had to be recognized that – as against

previous, perhaps more optimistic assumptions – the state is not able to undertake the solution of every kind of problems and disadvantageous situations arising in the entire society. It is justified therefore by all means that also various societal agencies should be requested to participate in this work. Finally, we must not renounce – either at present or in the future – the assistance of individual people and families permanently manifesting itself within the family and among relatives, but even outside family frameworks.

That is, many-sided or individual social disadvantages, handicaps may and have to be mitigated through diversified and thoroughly considered action both at present and in the future.

Instead of a conclusion: If I had written a motto to my analysis, I would have selected it from the work of a Hungarian statistician, Károly *Keleti* entitled "Our country and its people", published 110 years ago. In its foreword one reads the following: "I could follow our standing with individual judgement, some criticism, and if it is shown to be perhaps a little worse than according to views generally prevailing on our relations, let my excuse be that I risked to judge only on the basis of facts, wished to be strictly fair and tried to remain objective".

R. NYERS

PROBLEMS OF PEOPLE IN DISADVANTAGEOUS SOCIAL SITUATION FROM THE VIEWPOINT OF ECONOMIC POLICY*

In the socialist transformation of production relations – including distribution and exchange relations – considerable progress has been made in Hungary. Though there are still several important phenomena and concepts that need clarification, thus for example, small-scale family ventures as well as the role of international socialist organizations, nevertheless historically new relations have become rooted and are firmly dominating Hungarian economic life. This is an enormous achievement. It is a fact, however, that production relations based on socialist principles alone do not yet solve the efficiency problem of socialist national economy, what is more, if they are derived only from abstract theorems or become rigid for a longer period, they may even impede it. It is a great achievement that by means of socialist development inequalities of class dimension have disappeared and are no longer characteristic of the Hungarian society. But, it is a fact, too, that by the development of production relations alone we are not able to prevent the emergence of disadvantageous (handicapped) situations with significant inhomogeneous layers. The scope of action of economic policy may be extended to the

*On the basis of a contribution made at the conference on people in disadvantageous situation of the Hungarian Society for Sociology.

social average and large homogeneous layers, while it is the task of social (welfare) policy to solve problems over and beyond it.

The problems of efficiency and those of disadvantageous social situation are two independent phenomena, nevertheless they are connected with each other: if the efficiency of production is not satisfactory, then the material welfare of the population will rise more slowly than required and there will be less possibility to compensate for social disadvantages. But, if there is no improvement in the relations of people in disadvantageous situation, this restricts the rate of improvement of efficiency, since the human factor has a decisive role in improving work.

My first economic policy conclusion is that, in the interest of efficiency, the concrete form of production relations, i.e. the economic mechanism as a condition of the overall welfare of people should necessarily be developed. Parallel with this social (welfare) policy taken in a broad sense and the taking of public responsibilities should also be developed in the interest of both the realization of overall welfare and the compensation for disadvantageous situations. A precondition of the realization of socialism and social welfare is the domination of public ownership, but from the viewpoint of attaining this goal the mode of utilization of public property is of equal importance.

Development of the Hungarian distribution relations basically corresponds to our social principles. Income derived from property has been very much reduced in Hungary as regards its societal importance, representing a 1 per cent order of magnitude in the total of personal incomes, while the joint share of income based on work and of social allowances (benefits) amount to 99 per cent. Our living standards policy has been aimed at a simultaneous stimulation for work and the development of social allowances in their complexity ever since the early 1960s. This dual objective could be achieved only in such a way that the entirety of social allowances (benefits) – relatively underdeveloped 20 years ago – has been more rapidly increased than income based on work. According to data published by the Central Statistical Office only 18.4 per cent of personal incomes resulted from social allowances in 1960, while in 1980 already 32.1 per cent, with a parallelly decreasing share of incomes based on work. Our distribution system gave preference to social allowances to the greatest possible extent, so that in the late 1970s already 80 per cent of the increment of real incomes resulted from social allowances.

Thus, disadvantageous situations do not result from wrong major distribution proportions. However, it could not be said either that the present amount of social allowances would be enough to compensate for disadvantageous situations and only allowances (benefits) should be better distributed. In reality both the incomes resulting from work and the social allowances lag behind effective needs, thus they can not be increased at each other's expense. Present growth difficulties in the Hungarian national economy – among them the restricting effects of external markets – rather delimit possibilities for improving living conditions and make also the improvement of distribution proportions within the combined amount of incomes from work and social allowances difficult. On the present new growth path a somewhat faster economic growth may be realized by means of technological progress and higher economic efficiency.

My *second economic policy conclusion* is that to raise the share of social allowances at the expense of incomes resulting from work can not be taken into consideration as the main tool of improving disadvantageous social situations. The former will grow a little faster also in the coming period, but this is not enough to considerably improve the situations. After all, the main tool may only be the increase of the additional income of society resulting from an improved efficiency of production, that is, the objective of efficiency is, after all, interrelated with that of social policy. Therefore, it may be said concerning not only the entire economy, but also society that at present we are "captured" by the efficiency problem and in the future we have to "dominate" it more and more.

Should not the contemporary economic mechanism be made responsible in Hungary for the fact that low incomes are reproducing and disadvantageous situations of cultural character are not diminishing more rapidly? Some might draw this conclusion from the fact that under the old, directive economic control and management system the problem of those in disadvantageous social situation was not raised with similar weight and sharpness as at present. But, in reality, at that time we were less able to recognize various layers of the society, our social self-criticism was less developed and a multitude of other problems diverted more our attention from social problems of such type than is the case at present. True, prices were more stable then, prices of prime necessities were relatively lower, but wages still lower, there was much uncertainty in commodity supply, social allowances (benefits) extended to a much narrower field than at present. After all the degree of social inequality in total incomes was greater in the first part of the 1960s than at present. In 1962 the incomes of the upper tenth of the population amounted to 5.7-fold of the incomes of the lowest tenth, while in 1977 only to 4.1-fold. Thus, some levelling took place. In a summary it may be said that social problems should not be attributed to the reform of the system of economic control and management, without it they would be greater in all probability than at present.

Our current economic policy undoubtedly involves contradictions between efficiency and levelling as objectives, since earnings are differentiated according to qualification and performance, while human needs do not deviate from each other to a similar extent. We cannot get rid of this contradiction over the entire era of socialism, since the principle of distribution according to work performed involves inequality connected with work. However, it is very important that distinction be made between income inequalities resulting from differing earnings and those independent of earnings. Thus we may clarify where differentiation is required and where equality should be developed.

The divergence of earnings is a necessary and simultaneously an important social interest, without it the economic machinery of society could be run only with considerable losses. But, the extent and type of differences are very important, since an exaggerated differentiation may be just as harmful for performances as an exaggerated levelling. Relative earnings have been characterized in Hungary by exaggerated levelling from the early years of socialist constructions; in 1968–70 earnings became a little more differentiated, but soon a trend of levelling could be observed again. In 1970 the tenth

with the highest earnings obtained 4.04-times as much, while in 1978 only 3.85-times as much as the tenth with the lowest earnings. Relative differences in earnings between managers and subordinates, those with higher and lower qualification as well as skilled and unskilled workers, respectively, diminished to a similar extent, though absolute differences in earnings mostly increased. The major part of those determining the economic policy perceive the main problem not so much in approaching the lower and upper tenths of the scale of earnings to each other, but rather in exaggerated levelling within the same profession and scope of activity, as well as in the discrepancy between earnings and effective performances or responsibility. Therefore, our activity is aimed at finding a better way of linking earnings to performances. This is a complicated task of every enterprise management even at present, and in the future also the national economic order of the control of earnings should be developed.

Income differences are greater than those in earnings, besides, they are also independent of the latter to a considerable extent. The greatest difference is caused by the ratio of earners to dependants deviating by family, besides also by the considerable number of those with low pensions (retired under previous regulations); this is followed by differences in earnings, then income differences resulting from secondary occupation may be mentioned. It is characteristic that in households of active earners only 12 per cent of per capita income differences resulted from differences in earnings in 1977 and 88 per cent from other factors. All this convincingly shows that a solution for the problem of low per capita income or at least a considerable improvement in this field should be sought after not through the levelling of earnings, but through the mitigation of income differences which are independent of earnings.

My third conclusion is that it is appropriate to strive after a rational differentiation of earnings at workplaces, in harmony with performances and responsibility, while at the same time the role of social allowances in the levelling of family incomes should be increased parallel with the increase of the net social income. These two endeavours do not cross, but complement each other. If we manage to achieve in the future that incomes of families deviate from each other decisively only under the effect of differences in earnings, then income inequalities will be smaller and at least more justified than at present. In this process special importance should be attributed to the increase of family allowances, the settlement of low pensions by old right as well as to the rationalization of the building of and economy with dwellings.

Economic policy has no directly efficient tools to solve the problem of the cumulation of disadvantages – including also poverty. It has some possibilities in the formation of social (welfare) policy and cultural funds of enterprises, with the participation of trade unions in enterprise decisions and by taking institutions of economic democracy into consideration and ensuring a wider scope of action for them. However, it may do and has to do much indirectly. Such indirect tools are efficient central incomes control, regulation of the price level, improvement of the housing situation, development of health, social and cultural supply by means of the state budget, through stimulation of the advantageous side and pushing back of the disadvantageous side of the so-called

"secondary economy". By all this the multiplication of disadvantageous situations may be prevented, but their reproduction is not impeded.

The main tool of direct state intervention and its activity aimed at improving the situation is social (welfare) policy. Its basic institutions do already exist and function, but I think that they work in many cases separated from each other, unfortunately with underdeveloped tools and methods, sometimes in bureaucratic separation from the "thick of life". Precisely on this account they are not properly prepared to recognize the cumulation of disadvantages and to improve considerably the situation of the population concerned. It is obvious that the decisive precondition of the development of social policy is to increase financial funds, but I believe that for an improvement of the situation of those affected in several respects also the institutional system needs a fundamental renewal.

My fourth conclusion is that science, economic policy, cultural and social policy have to deal with the problem of cumulation of disadvantages more purposefully than at present. By means of examining social layers a better image should be obtained of the typical cases of cumulating disadvantages. National planning and the state budget have to ensure the enlargement of financial assets as much as possible and the ministries and local authorities concerned should display a better coordinated and more complex social policy practice than at present.

The question may be raised if it is justified to make so-called "social minimum" computations in the future with certain regularity, with the aim of determining social tolerance limits of differences in living standards depending on our development and progress and to grant increased social help to layers in disadvantageous situation. Despite difficulties and initial uncertainties of computations I still hold the view that making such computations is desirable and the analyses of 1963 and 1967 provide some basis for them. I think that Hungarian public opinion is mature enough to receive and handle such information with an appropriate sense of responsibility. Socialist democracy and national consciousness of responsibility may be deepened also in this way.

What may be the role of social or collective action outside state policy in the solution of social problems?

I share István *Huszár*'s view that spontaneous action by various communities, as well as family collaboration in a narrower or wider circle are relevant factors. Their role may be further increased either in the interest of overcoming poverty, helping in the solving of housing problems or in that of compensating for some other disadvantage.

However, social actions of charity character may provide only occasional or temporary solution, but do not replace the role of state and social institutions, while if led by good intent they are worth of recognition. The principle and practice of social solidarity is closely connected with socialism both as class solidarity and as that of labourers within a narrower circle. But, there is one case when such an action would seem repugnant, namely, if it were used by some people only as an occasion to express their objection to general political line of our party in a concealed way. It would be ignominious to make such a serious issue a pretext for this.

Researches of social science have considerable tasks in revealing connections between economic policy and societal policy taken in a broad sense, adjusted to our contemporary circumstances. Ways of adjusting earnings to performances and a gradual levelling of family incomes should be sought after under the conditions of slow economic growth. Researches should be made on the possibilities of solving the housing problem, the role of work stimulation and social allowances in the elimination of disadvantageous situations, just as on the concept of the complex development of social (welfare) policy and the possibility of a better coordinated functioning of the institutional system.

I think that the standpoint taken in István *Huszár*'s paper according to which no rapid and spectacular improvement of the situation is possible, but we are not forced to idleness, either, is highly justified. Hungarian economic policy is open to receive the problem, the link between economic and social policies is close and further strengthening. Our financial assets are increasing at a slow rate at present; this restricts our possibilities, but cannot impede us in the process of societal rationalization.

K. KULCSÁR

SOCIAL POLICY IN TODAY'S HUNGARIAN SOCIETY

What is social (welfare) policy good for after all? Are benefits "due" automatically in certain cases? Are allowances, benefits given as presents to the beneficiaries (I am using this term intentionally instead of "those in need")? Is there any social interest at work in all this beyond the element of solidarity, aid and charity or perhaps we want to "justify" just by such measures that we are building a different society? Do social policy measures promote or limit the so much desired efficiency of the economy? Finally: how much can the state undertake, to what extent can the burdens of the state budget be increased? We could further continue these questions which are being discussed widely nowadays in Hungary, stressing however, that we could hardly answer them here.

The increasing number of questions indicates at any rate that social policy as practiced so far provokes discussion, further thinking and, that finally decisions are needed.

In order to aid decision-making research projects are being started, whose final aim is the elaboration of a uniform social (welfare) policy concept. The research themselves call for discussion. However, the subject of the discussion lies *deeper.* The Hungarian society has reached a stage of development at which the characteristics of her progress – including the external, first of all world market conditions and the political environment – require very conscious, thoroughly decisions. As a matter of fact, namely, the

economic and social processes set off by today's decisions are accompanied not only by immediate, short-term consequences, but they produce permanent effects which have to be taken into account later and which constitute new conditions for the development of our society. (It can be experienced even today how irreversible, at least at our present development level hardly reversible, consequences our *earlier* decision may have.)

The most important starting principle is that *social (welfare) policy, economic policy and societal policy constitute a unity* and, as a matter of fact, none of them can be shaped rationally without regard to the others. (This principle is far from being new but it has to be borne in mind.) This relationship also means that all the three *correct* one another in a certain sense and to a certain extent – depending on the given socio-economic situation – or at least they are suitable for such correction.

In principle it would be societal policy that would define targets for the shaping and development of society. This would mean the formulation of such a set of targets the realization of which would influence the shaping of economic policy, and the problems arising from the practice of the joint application of these policies could be solved by the means of social (welfare) policy. However, the scheme is a very simplified one in this form. It is so first of all because the relationship between targets and instruments is not so simple even in case of a much less complicated relationship and, secondly, the consequences of real historical, social situations do not always "work" in line with this scheme. For there may be periods when economic policy requirements become "too heavy" at the temporary detriment of societal policy targets and there may be also periods when societal policy targets become indistinct, are not clearly defined or changes in their contents are not expressed definitely (in order to preserve at any price perhaps some kind of ideological and/or political continuity) and it also occurs that social (welfare) policy, taking the place of societal policy, undertakes to achieve societal policy targets which it is impossible to attain with instruments not beloging to its tasks.

This theoretical separation may seem perhaps too abstract, too unreal, maybe too theorizing which practice can not tackle. However, this separation can be made "real" through the example of the so-called multiple deprived stratum. A significant constituent part of this stratum is the group of persons performing unskilled and hard physical labour who are in a handicapped position as far as their settlement, housing conditions, the quality of labour and the connected qualification and cultural needs are concerned, which are reflected in their way of life, the size of their families, and also in the level of per capita incomes connected with it. According to the findings of investigations this stratum is being reproduced in a noticeable manner – although at a diminishing rate since the number of unskilled workers is constantly decreasing. This means that the children of these workers remain with high probability in this stratum. It may be added this stratum displays deviant behaviour (in terms of committing crime and alcoholism) in proportions exceeding its size, and children of persons in this stratum can be found among those under state tutelage (in institutions) in a much greater proportion than the size of this stratum would suggest.

However, the conditions of this stratum, of those being multiple-handicapped can be influenced only to a certain extent by the means of *social* (welfare) *policy*. The efficiency of "allowances" linked to the number of children is limited and hardly suitable to reduce even the reproduction of such "status" at a considerable rate. There can be no doubt however, that the permanent existence of such a type of multiple-deprived stratum is incompatible with the aims of our society (we are not speaking here of those in multiple-deprived position for other reasons). Beyond this the existence of such type of a "stratum" may retard development in several respects, it causes social problems and might lead to potential political tensions.

Consequently, the handling and solving of problems emerging in this manner is a task for *societal policy* which is obviously feasible within *certain economic limits only*. Although it is clear that the elimination of this stratum (and the reduction of undesired phenomena) would require the abolition of jobs which require hard physical labour, of those which "attract" unskilled labour, this would call for such an amount of investment. such development and transformation of technological processes which are impossible under the present economic conditions (and presumably in the near future too). The economic policy considerations, or more precisely constraints, effective in the economy itself which keep even economic policy decisions on a forced path, limit the possibilities of societal policy to such an extent in this case that a real solution of the task is not feasible in the short run.

The social integration of the *gypsy population* is also a societal policy problem. Beyond cultural, educational, health, etc. measures, which require also financial means, societal policy considerations speak in this case to a certain extent for maintaining – at least temporarily – jobs requiring just unskilled labour. As a matter of fact, regular employment is a fundamental precondition of the integration of the gypsy population but their overwhelming majority is not in such a position – despite efforts aimed at it – that the attainment of a semi-skilled or skilled labourer's status could be a realistic aim for them. Therefore, a great part of them can be employed only as unskilled worker. This, however, can retard in certain places technological development, for example because it is necessary to "ensure" to a certain extent jobs which are able to absorb such unskilled labour.

The problem is rather complicated and cannot be discussed here in every aspect. However, it is certain that the basic phenomenon itself – whether the unskilled workers, or the gypsy population, or other groups of persons in multiple-deprived position are concerned – cannot be handled at present by the means of societal policy. It follows that social (welfare) policy is forced to a certain degree of cooperation. It could hardly assume or replace the tasks or means of societal policy, but it is forced to fill in certain gaps with its own means; its correcting task and practice are even significant. I have to mention that in case of strata in multiple-deprived position, because of the characteristics of the "receiving" persons, the effect of decisions born in other spheres of societal policy might be dysfunctional. For example it is known from the field of population policy that the child's care benefit was availed of primarily by unskilled or hardly skilled workers

representing even otherwise a low earning level, since the difference between wages and the benefit was the lowest just with them.

It was thus right in the multiple-deprived stratum that the number of births was increasing and social welfare policy tasks became simultaneously more and more serious.

The above mentioned "interplay" of societal policy, economic policy and social welfare policy especially justifies the theoretical stand that *in the present historical and social situation social welfare policy can only aim at the improvement of disadvantageous conditions independent of work, thus at the reduction of such disadvantages.*

The use of the term "present historical and social situation" already indicates that *the concept of social welfare policy can change* historically and, naturally, it depends on the character of the fundamental socio-economic formation. There are several factors effective in the deprived situation itself arising independently of work and the cumulation of various disadvantages can be accompanied by a particularly grave consequences. The diversified character of the social welfare policy tasks is connected also with this.

At the present development level of the Hungarian society a simultaneous solution of all the social welfare policy tasks with equal expenditures is impossible. Therefore, we have to *make a selection,* a choice among the tasks. This is a help only to a certain extent; nowadays, under the present financial conditions the possibilities of social welfare policy depend perhaps to a greater extent on the system of preferences and the *self-restraint* of the societal policy.

This may sound strange, especially when the limits of the performance of the economy or the need for increasing this performance are being frequently and rightfully stressed. Yet this is so. It has been pointed out by far too many authors, so it is superfluous to discuss it here in detail, that the increase in the performance of the economy is a function not only of investments, the transformation of the economic structure, and the extent of ability to adjust but also of the development of the spheres outside the economy. Thus, the development of the economy is not exclusively an economic question, it is accompanied by the solution of societal policy tasks, too, or measures taken in the economy require a societal policy approach. At first sight it might seem very simple to take money for the solution of our economic and even our societal problems from where it is more available. From the financial point of view, bearing in mind the equilibrium of the state budget, it may be possible to raise taxes on incomes originating from outstandingly profitable activities, let us say on incomes from household plots. The consequences of a decision taken not too long ago have already warned that such kind of experiments are accompanied by serious economic and political problems. Nevertheless, such kind of ideas do emerge from time to time although it is clear that nowadays such a decision would lead to disastrous consequences in Hungary. It would destroy the present system of agriculture well established by now – with collective and private farms duly complementing each other – food supply may became problematic (just now when for international reasons it has to bear extra burdens), not to mention the serious political consequences. A decision arising from such "societal policy" considerations (coloured by the recurring view that the peasantry is

"getting on too well", disregarding the actual weight of the peasantry and the fact that the majority of household and auxiliary plots are owned by workers), thus, such a decision – and let us add that many others similar to it that would lead to a decrease in performance – cannot be allowed in Hungary.

The possibilities of the economy necessarily compel societal policy to exercise self-restraint. This self-restraint may become manifest in the extent of realization of targets and tasks set (i.e. in alloting *something* to overy sphere if means are scarce) on the one hand, and in *weights* assigned to targets and tasks on the other.

Backward or developing countries are characterized in general by a great number of tasks and ambitious undertakings, the realization of which remains partly at the level of jurisdiction, i.e. laws are passed which are to be regarded as "pious declarations of intent" instead of efficient measures requiring economic efforts, and partly tasks are weighted according to specific aspects (frequently prestige considerations which in some cases can be well considered as substitutes).

We could hardly say that these specific phenomena were unknown in the Hungarian development or that they already disappeared. The revision and revaluation of preferences of the societal policy, elimination of subsidies and investment which do not serve real material or intellectual values, or at least their radical reduction, etc. are inevitable in view of the further development of the Hungarian economy and society. All this is especially important in order to be able to solve the really important societal policy tasks and because of the correcting activity of the social welfare policy.

At the present development level of our society, at the time of transition of the economy to the stage of intensive development – when the requirements of this transition influence the tasks of societal policy too, or more precisely the evaluation of such relationships is required – the self-restraint of societal policy is especially important.

This self-restraint may assume various forms. Most probably the solution to be adopted may involve a revision of the allotment of various services free of charge or their prices, a limitation of undertaking tasks, a weighting of tasks, a grouping and regrouping of forces and the consideration of problems arising in this manner in terms of consequences.

Naturally, there is no possibility here even to outline the ways and modes of the self-restraint of societal policy since it is not on the basis of sudden ideas and improvization that we have to proceed. By way of example we mention here that the sport movement has been developing in Hungary more and more in the form that we are educating sportsmen with a short sport career enjoying privileged position, with rather great financial and organizational inputs. At present this appears at various levels: development of the so-called *first class sport* serving primarily prestige considerations is carried on not only at national level but at the level of counties, moreover in smaller settlements and enterprises. Investment in the first class sport or so-called competition sport is not accessible in most cases to mass-sport promoting the healthy way of life. The so-called 'jobs for fellow sportsmen', or earlier the sham jobs and the various other privileges cause a distortion in values that is already problematic from the societal aspect too. Even countries

with economies more developed than ours cannot afford this luxury, nevertheless in Hungary sometimes it is conceived as an achievement of socialism that this type of competition sport (I want to stress it again that not the mass sport) is being developed from state or enterprise funds, at any rate from *public money*. In this case the self-restraint of societal policy would be desirable not only in the interests of the well-considered allocation of financial means and the healthy formulation of social values but, as a matter of fact, in the interests of the competition sport too. (I only want to mention that the sport movement has an organ of national authority, and a country organization system etc., while the social welfare policy has nothing like at its disposal.)

The self-restraint of social policy, i.e. *selection* among tasks that may be undertaken in order to increase the efficiency of social welfare policy is important also because the easing of problems arising from the harder economic situation through social (welfare) policy may be a *factor reducing political tension* in a certain sense. Though neither societal policy problems, nor economic policy problems can be solved by the means of social welfare policy, yet, since all of them have social welfare policy aspects, the correction possibilities through social welfare policy cannot be neglected from the point of view of *politics* as a whole.

The problem of efficiency of a socially and politically desirable social welfare policy – to put it simply – is *not only a question of money*. The frittering away of available means, the overlappings and the resulting disorganization, and naturally the less efficient use of financial means, primarily their more *concentrated application within social welfare policy* call for a uniform organization system (because self-restraint is needed not only in societal policy but also in the social welfare policy).

It cannot be stressed enough that social welfare policy is *a task of the State*. It is a task for the state even if local and enterprise level social welfare policy and in certain cases societal activity are also acceptable.

However, all this can only become efficient if an adequate organization, a network of social care are established under uniform direction. At present the various tasks of social welfare policy are dealt with in Hungary by various ministries, and the National Council of Trade Unions, social organizations etc. cooperate, too. It is not only the management that is problematic, but effective provisions of law are also fragmentary and thus unclear and even organization is ineffective. As a matter of fact, even the scope of persons entitled to social services has not been properly surveyed, every ministry and organization is informed only of those belonging to its own authority, thus even the foundations of the necessary coordination are lacking.

It seems, however, as if we committed here the same mistake to which reference was made elsewhere: for the lack of necessary financial means legal regulation is frequently used, modifications in organizational solutions are applied as a *substitute*, expecting of this the solution of the problem, or at least its more efficient handling, and now we are proposing something just like it. (In the development of the Hungarian social welfare policy examples for pushing organizational, management aspects into the fore *as substitutes* can also be found. Let us think of the special features of the implementation

of the law on the National Fund for Population and Family Care (Act XIII; 1940).) However, we believe that through an adequate regrouping of means, the elaboration of a uniform social welfare policy concept (including the examination of factors influencing the efficiency of the legal measures of the social welfare policy) and through devising a uniformly managed organizational system suitable to serve this concept, there is a possibility even under the present difficult economic conditions to carry on a more efficient social welfare policy which would thus help to ease (or to prevent) social tensions.

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BOOK REVIEWS

COTEL, K.: *Vállalati folyamatok rendszerszemléletű szervezése* (System organization of enterprise processes.) Budapest, 1981, Közgazdasági és Jogi Könyvkiadó. 442 p.

The attention of experts concerned with the management of industrial enterprises and the control of various activity fields has been directed in recent years more and more towards the tasks of modernizing the organization of enterprises. This is reflected also in the Hungarian professional literature. Books are published primarily on the theory and methodology of organization contributing thus to the theoretical foundation of this special field. Other works discuss methods of organization in individual fields, especially those connected with computer techniques.

In the series of professional publications *Cotel's* book is a gap-filling work. In accordance with its title the main point of his book is constituted by the concrete, practical tasks of organizing major enterprise processes, assuming the foundations of system and organization theories as known. Such a type of book not concentrating on some particular individual industrial branch, has not been published by a Hungarian author for more than 15 years.

The book surveys the most important enterprise activity fields discussing one by one the organizational tasks connected to these fields. It integrates the individual functional tasks with their organizational aspects on the one hand and tries to establish connections among the organization of various processes, on the other, calling attention to a number of new elements to be satisfied in the organization of enterprise processes.

The book serves also as a text book. The systematic, closed, concise manner of discussing problems follows from this fact, aiding the reader in placing the individual problems in the intricate problem complex of organization. Nevertheless, one cannot expect of a book serving as a textbook too to discuss problems of everyday practice still under research and far from clarification nor to look for new solutions.

The book is divided into 9 chapters. The first and second chapters – 15 per cent of the total volume of the book – discuss *general questions.*

The chapter presenting the *enterprise as a system* underlines the need for realizing the unity of goals and instruments in the management of enterprise activity. It points out that the enterprise is a complex system which has to adjust itself to the current, nowadays rapidly changing and generally growing requirements.

The second chapter discusses the *general model of enterprise organization* presenting the characteristic features, factors, process of organization. Special sections deal with requirements and tendencies prevailing in the enterprise organization and problems emerging in connection with the introduction of new organizational solutions. The author considers it important to elaborate variants of organization concepts and to determine optimal solutions in terms of value analysis.

The book deals in several places with the problem of harmony between the technical and organizational levels, stressing its importance and pointing out that the partial task solved at the lowest level "pulls down" to itself even solutions worked out at the highest level. According to our experience this set of problems has an outstanding importance in case of a new technology penetrating already existing systems. Although in

principle it is true that the more advanced technology "forces out the corresponding solutions in material transport, quality control, production organization, etc. within a short period of time" (p. 39), yet investigations carried out in this field in Hungary indicate, unfortunately, that this does not happen at all or only in part. For the enterprise organization and process system incorporating new technology have been formulated to suit conventional technology and in the best case it is able to satisfy only the requirements of the latter. When installing new technology, it is forgotten that its effect on the system includes also new requirements raised towards organization.

The following two chapters of the book, some 30 per cent of its total volume, deal with the organization of *the main and auxiliary processes of production.* Discussion of the organization of production starts with the role of production in the activity of the enterprise and with a brief survey of enterprise production policy.

The organization of the *basic production process* and factors influencing it are discussed distinguishing the character, and complexity of the process, the homogeneous and heterogeneous character of processes necessary for the creation of the individual elements. It presents the production types and their selection in connection with the enumerated characteristics, as well as the classical production systems and the major computations necessary for their construction, aspects to be considered. Special attention is devoted to the importance of automating production and to its individual economic and organizational questions.

In the chapter discussing the *organization of auxiliary and servicing processes of production* the reader is given many useful instructions concerning enterprise maintenance, management of means of production, energy management, and the ways of organizing internal transport. It is an important statement in connection with the technical, organizational and economic importance of these processes that together with the rising general technological and organizational standards of production, the importance of auxiliary and servicing processes is also increasing, since the maintenance of productive equipments of high technological level, continuous raw material supply, etc. impose greater tasks on them.

In the chapter on *organization methods of maintenance* the author renews the idea of the traditional system of planned preventive maintenance which has been pushed regrettably into the background lately. The main point of this is that the smaller and larger repairs are not performed at random (or at the time of a breakdown) but the small, medium and general repairs and those interposed, are performed in a definite cycle based on experience together with structural and accuracy investigations aimed at establishing the technological condition and the degree of wear. This method is being "rediscovered" now abroad with the modernization that the planned diagnoses are given outstanding importance and it is these that coordinate the current tasks instead of a mechanical programming of repairs.

The fifth chapter on the coordinated organization of *sales and development process* is an important part of the book reflecting modern attitude, and amounts to some 15 per cent of its total volume. It is correctly emphasized in the introduction that beyond the need for increasing efficiency and flexible adjustment, these two areas are interrelated and interdependent to an increasing degree.

After surveying the subject and possible strategies of enterprise sales and development policy, the book discusses among the organizational tasks of the sales process market research, use value analysis, market organization and advertising activity. It stresses that with the realization of the sale the sales process itself does not end for the enterprise, since installation, handling instruction, repair under guarantee, servicing and spare parts supply are also included.

The contents of *enterprise development* is approached by the author in an interesting manner. He says that "it incorporates everything that is suitable to promote the creativity of the staff of the enterprise for a more favourable utilization of the means and objects of labour available to the enterprise and for the realization of products and more advanced production processes" (p. 228). It is regrettable that further on the book confines enterprise development to technological develop-

ment and the development of fixed capital and separates the tasks of technological development connected with new and existing products from investment, although all these are systematically extremely closely interrelated.

The last four chapters of the book – some 40 per cent of its total volume – deal with the organization of the production control and material management processes, the major organizational requirements of labour and wage managements, as well as with the organizational structure of the enterprise.

The presentation of the methods of traditional programming, production accounting, production preparation and production charges applied in the field of *production control* is adequately supplemented by a sub-chapter reviewing the effects of the application of advanced computer techniques, the functioning of the centre for production control.

When discussing the *material management of the enterprise* the author lays special emphasis on the importance of raw material and fuel saving management, which is especially timely nowadays, and also on methods promoting it.

Discussion of the organization of *internal transport in the enterprise* in two places, in connection with the auxiliary and servicing processes of production and in the chapter on raw material management, reflects difficulties of integrating some individual, traditionally separated fields and processes.

The author states that "the overwhelming majority of activities belonging to the concept of material transport within the enterprise is directly connected to production, or is an integral part of the production process". At the same time its task is defined as "transportation of raw materials, semi-finished products arriving from outside the enterprise, to the store-room, transportation of work pieces among the work places and transportation of completed pieces to the store-room". (p. 86) Considering the opinion held also by many specialists, according to which every movement of work pieces within the work place – except for those of explicitly technological character (e.g. the exchange of the work piece) – belong to the transport of materials, the quotations show clearly that the transport of materials is a fundamental precondition of the realization of the basic activity, it covers the production process from factory gate to factory gate. Perhaps it is not the most fortunate solution to discuss a part of this process (e.g. the shaping of the raw material flow) under the subject of raw material management and others among the auxiliary process as internal transport.

In the chapter on *labour and wage management* a separate part deals with the organizational requirements to be realized in raising labour productivity, opening up reserves in labour and wage management, as well as with organizational tasks connected with improving the living and working conditions of workers. When discussing *labour organization* the book states that "this discipline is not confined in fact to the organization of performing labour, to disclosing the connection between the working person, the machines and the object of labour but it sums up the related economic, organizational, psychological, sociological knowledge". (p. 366) It would have been useful to provide more extensive reading on this organizational field of outstanding importance.

The last chapter of the book dealing with the *organizational structure of the enterprise* points out that coordination within the enterprise is of fundamental importance in any organizational structure. A great number of examples are given for the organizational structure of the various enterprises and activity fields.

To sum up, we can state that the library of enterprise specialists has been supplemented again by a valuable work.

GY. PARÁNYI

Szocialista vállalat ("The socialist enterprise") Vol. 1–10. Budapest. 1975–1980. Akadémiai Kiadó.

It is a rare occurrence in a discipline to get a complete follow-up of the "evolution" of an important subject in one single series of publications. This rarity is witnessed – and enjoyed – by the readers of the series "The socialist enterprise" published by Akadémiai Kiadó and by the users of the findings of the research.

The series entitled "The socialist enterprise" discloses the findings of a complex research work

on the subject stated in the title. "The SE" as a research project is a focal point of Hungarian social science research work. In this mainstream of studies for the purpose of laying down the scientific foundations of social and economic development research work has been done – since 1972 – under the guidance of the Hungarian Academy of Sciences and has been coordinated by the Budapest Karl Marx University of Economics.

Akadémiai Kiadó, undertaking the publication of the proceedings of this research project, has so far published ten volumes of the said series: the first one in 1975 and the tenth in 1980. The ten volumes so far published represent an impressive length: almost 130 sheets (of 40000 "n"). By their very quantity the research and publishing performance have already merited evaluation and summary. Six of the volumes published since the starting of the series are devoted to providing comprehensive foundations for the main subjects and research methods while the remaining volumes lay down the research findings in different partial subjects.

The demarcation of ways, stating of tasks and definition of notions accompanying the starting of research work were also done in the framework of wide discussions. Karl Marx University of Economics attending to the coordination of work in the main line of research has given a forum to these discussions by devoting the agenda of the scientific session held on its 25th anniversary to five research lines (partial themes) of the main project. These discussions are contained in five volumes of the series: lectures and reports as well as, occasionally, more momentous contributions. In volume 1: "Social ownership and social enterprise", in volume 2: "Enterprise organization and management", in volume 3: "Labour administration and working conditions of enterprises", in volume 4: "The commercial functions of the enterprise", and in volume 5: "The optimum use of enterprise funds" were published. Volume 6 is also of the groundstone type, again containing the proceedings of a scientific session, the one held on the 35th anniversary of the liberation of Hungary. This volume is a special one for it treats the subject of enterprise efficiency from the point of view of agricultural enterprises.

Reverting now to the evaluation of the contents of the different volumes, the most essential analysis for the scientific foundation of the research subject is immediately given in volume 1 in the paper "Thoughts about the development of a Marxist enterprise theory" by member of the Academy Kálmán *Szabó*. In the introduction the author emphasizes the inquisitive kind of the ideas he raises yet this remark must be understood most probably in the light of the enormous dimensions of the entire research project because the theoretical and methodological statements he makes are most definite ones (from the point of view of the narrower field covered by the study) and serve for making out the way towards a unified Marxist enterprise theory rather than search for it. He exactly clarifies the conditions necessary for developing the unified Marxist enterprise theory and the importance of research work done in the field of "the socialist enterprise" in this theory-creating work. The direction, contentual frameworks and major tasks of future research work are set out mainly in the exposition of the latter.

This paper showing high theoretical standards and setting at the same time high requirements towards future research became the starting point and reference for the other statements published in the volume and made first as reports or contributions. Ottó *Pirityi* noted the need for stimulation to enhance the raising of the quality of enterprise work done, with the remark that the entire wage – and not only some given components – must be taken into account from the viewpoint of incentive. Katalin *Szabó* noted that certain experiences drawn from the structural development of capitalist enterprises deserve thorough analysis when the enterprise theory is elaborated, but with due regard to the motives of deliberate aspirations in the background of the symptoms. Lajos *Zelkó*, Sándor *Zsarnóczai* and Kálmán *Kovács*, as well as Ferenc *Fekete*, the latter from the point of view of the assertion of the special features of agriculture, contributed important points to the contents of the reference paper on the development of the socialist enter-

prise theory. Each of the other contributions made at the session were valuable additions to the clarification of the subject.

Volume 2 contains the papers submitted to the said scientific session on the subject of "Enterprise organization and management". The opening paper designating the research tasks in the narrower subject (by Sándor *Varga*) was followed by papers actually defining certain sectors of the field and even reporting on results of the research. Two of these deserve to be specially noted: the papers by Miklós *Marosi*, "Main questions of the assessment methodology of the efficiency of organization" and by Ferenc *Nemes*, "Behaviour, interests and reserves in enterprise economy". The paper given on the efficiency of organization (Miklós *Marosi*) discussed the subject in the frameworks of an enterprise assumed to be a system and interpreted enterprise organization in this sense as a function aimed at creating and maintaining harmony between the purpose and structure of the enterprise. Having pondered an extremely broad review of the literature on the subject the paper gave a subsequent definition of the methodological requirements which are always rooted in the special features of enterprise organization aimed at some partial system.

The paper showing the sociological considerations asserted in enterprise business management (Ferenc *Nemes*) set out from the regularly renewed reserves of enterprises, then it analyses the types of behaviour found in practice with respect to the use of reserves.

The other authors of this volume cast light on various aspects of the research into this subject, relating to information, planning methodology and management (supervision).

The problems of labour administration and working conditions in socialist enterprises are discussed in Volume 3 of the series. This is once again the summary of the proceedings of a section of the aforesaid scientific conference. The opening paper (Ödön *Józsa*) deals with the role of labour administration activity in the socialist enterprise management and gives an analysis of the contentual problems pertaining to this complex field of activity. Going beyond the outlining of the current standard of this activity the author also states the development tasks and proves the need of development. This is done from the point of view of developing the intensive stage of socialist economic growth, weighing each technical and economic factor or postulate pertaining to the subject. In the discussion of the report the planning (László *Iványi*), legal (Andor *Weltner*), psychological (Ágoston *Papp*), sociological (Tamás *Rozgonyi*), as well as certain vocational aspects (e.g. relating to interior trade, agriculture, transport) of the subject were also covered.

Volume 4 of the series carried the very humble title "The functions of the enterprise in home trade". As a matter of fact this volume offers much more than the simple definition of the contentual range of functions. The volume covers the conditions related to the development of enterprise marketability, reveals many a neglected aspects of drafting purchase plans, outlines several essential features of the food market, and indulges in a number of special facets of commercial activity. The two most valuable treatises in the volume are the report by László *Molnár* on the system of conditions of enterprise marketability, the one that opened the discussion, and the contribution by Mrs. István *Hoffman*, an analysis of the economic behaviour and supply level of Hungarian families. Delimitation of the tendencies affecting the changes that consumption goes through is an especially valuable part of the report by László *Molnár*. The study of Mrs. *Hoffmann* is appreciated because of her exposition of the outlines of the economic model of Hungarian households. (The contents published in this volume are referred to by Mrs. *Hoffmann* in Volume 10 where she gives a detailed analysis of the characteristic parameters of the model.) In this model the various branches of research into consumption are synthetized by the author in the framework of the smallest unit of consumption and this way she determines the most essential tasks of commerce whereby, if implemented, public supply could be improved.

Volume 5 of the series is a discussion of the conditions, methods and instruments of "The optimum utilization of enterprise funds". The introductory paper by Endre *Megyeri* gives the scientific grounds for achieving the goal contained also in the title of the volume, i.e., it exposes the problems encountered – from the point of view of the desired goal – owing to the not sufficient-

ly consistent measurement of national economic and enterprise efficiency. The study, beside its being penetrated with the intention to reach harmony between enterprise and national economic interests, also defines the conditions by the consideration of which the hoped-for harmony could be attained. This is the point where the paper, written on a very high scientific standard, develops a powerful target-setting influence from the practical point of view. The paper of Kálmán *Kádas* based on the research of particular conflict situations, also contains recommendations of problem exploration and problem solving. He discusses methods of industrial programming whereby a socialist enterprise striving at higher profitability can stand the test of efficiency requirements from the national economic point of view too. The other studies in the volume also scrutinize essential points of the subject or present the different experiences gained in the course of research pertaining to the subject. Mrs. Ferenc *Nyitrai* and Lajos *Ollé* give a review of the experiences and measuring problems of efficiency analyses, László *Horváth* discusses the problems of coordinating enterprise strategic objectives, and Ferenc *Vági*, Pál *Pillis*, Csaba *Csáki*, György *Tallós* and Attila *Chikán* undertake the solving of different sectoral or methodological partial problems.

Volume 6 gives a review of agrarian economic research work done in the frameworks of the main line of the research "The socialist enterprise". The most important paper in the volume is the one by Ferenc *Vági* on the relationships between efficiency of production, social productivity as well as incentive profitability. The said relationships are analysed under the circumstances of industrialized Hungarian agriculture. After a deep analysis of the relationships the tasks are stated which agriculture has to solve in the interest of higher efficiency (e.g. modification of the production pattern). The other papers in the volume provide a big variety of complementary contribution to the statements made by Ferenc *Vági*. For example László *Bethlendi* deals with the role of production system in the industrialization of agriculture, Elemér *Kiss* with the financing of investments of agricultural cooperatives, and Sándor *Mészáros* with dynamic models which are suitable for enhancing the efficiency of agricultural production.

Volume 7 of the series once again clarifies basic problems determining enterprise research work. Kálmán *Szabó* scrutinizes the basic functions of the socialist enterprise from the political economic point of view. He sets out from the point that on basis of achievements of Marxist economic research it is already possible to determine the common characteristics of the socialist enterprise, even if the circumstances of enterprises functioning in different socialist countries as well as their position in the organization of the economy and their structure of organization are different. On this ground the study lists in turn the theoretical theses of Marxist economic science from which the main functions of the socialist enterprise can be derived. The analysis is extremely profound and for the definition of the basic functions it also bears in mind the theorems expressed in implicit form in the major theoretical statements of Marxist political economy. Closely related to the paper of Kálmán *Szabó* is the study by Jenő *Wilcsek* discussing the enterprise structure of the economy and devising considerations of fundamental importance for further research work. The factors determining the enterprise structure are exposed in detail by László *Kahulics*. An, in part critical, analysis of system of management of industrial organizations is given by Erzsébet *Noszkay* and Pál *Kárpáti*. In the concluding study of this volume Miklós *Marosi* makes a both theoretically and practically remarkable attempt to analyse the internal incentive system of the socialist enterprise from the aspect of the theory of organization. His paper is based on a minute and painstaking analysis of the literature on organization theory.

The aforesaid volume of treatises is followed by two volumes elaborating their subject in the form of monography. In Volume 7, Tamás *Sárközi* and Ferenc *Fábián* treat the right of enterprises to associate while in Volume 8 Imre *Sándor* gives a detailed presentation of the role and functions of advertising in the socialist economy. The volume dealing with legal problems is significant because its contents are suitable for laying the scientific grounds for the development of the system of organization of the economy, i.e., in this context, of establishing a higher degree of the right to associate to be granted to the socialist economic organizations. The inclusion of the volume dealing with advertising into the series is

justified because it is reasonable to make the socialist enterprises, working under more intricate circumstances than before, more aware of the opportunities of the modern organization of relationships.

Volume 10 of the series contains studies related to the sphere of marketing. Articles dealing with the subject of trade are already found in Vol. 4 by several of its authors (such as László *Molnár* and Mrs. István *Hoffmann*). In the tenth volume of the series László *Molnár* reviews a fairly extensive research aimed at the exploration and assessment of efficient methods of enterprise marketing work. In the interviews conducted in the course of research it was intended to show the enterprises' sensitivity of price, the fluctuations of demand for their products, the feasibility of increasing the range of their products and their other conditions affecting marketing methods. The other papers of the volume define the role of market research and of the system of market information in the service of enterprise strategy, show methods suitable for measuring the marketability of investment goods, deal with reasonable commercial risk, as well as with the problems of cooperation between enterprises and of contractual relationships between enterprises.

Last but not least, by noting that the aforesaid ten volumes so far published contain a total of ninety-six papers by one-hundred-and-one authors, it is believed that the dimensions of research work into the problems of socialist enterprises can also be appreciated. It is equally useful for research workers and practical experts to study the well edited volumes: it will inspire the first ones to systematically reassess and develop their own methods and to bear in mind the considerations suggested by research workers in related disciplines, whereas the latter will be stimulated to use the up-to-date methods. There will most certainly be international repercussions too, since the problems, methods and tendencies discussed in the published volumes are found in other socialist countries as well.

K. COTEL

ADAM, J.: *Wage control and inflation in the Soviet bloc countries.* London-Basingstoke, 1979. The Macmillan Press Ltd. 243 p.

This treatise is engaged in a problem that has been intriguing western economists for a long time and has become a growing concern also of experts: in socialist countries the relationship between wage control and wage trends and inflation.

The book is focussed on the analysis of the current wage control mechanisms of five socialist countries, namely, Czechoslovakia, Poland, Hungary, the German Democratic Republic and the Soviet Union. However, in a longer historico-economic review the author also outlines the development paths of the wage control mechanisms and shows their close relationship with the type of the system of economic control. The book confronts two contrasting systems of wage control: the one functioning along with direct economic control applied in the GDR, the Soviet Union and in Czechoslovakia, as well as the wage control mechanism used in the indirect system in Hungary. (The Polish system is of a mixed type, wages are partly linked to plan indicators, however, the latter already include an indicator showing market sales.) The author's opinion is clear: from the point of view of efficiency and flexibility he finds the indirect system to be the better one. Beyond detailed documentation discussions going on till now in the socialist countries about the types of the system of wage control are presented and the confrontation of attitudes is appreciated. The review and analysis given in the treatise of the special features of wage control systems are valuable also because till 1969 the author had taken an active part in framing the Czechoslovakian mechanism and so his analysis and statements are not simply those of an outside observer and are not based only on information learned from the literature.

For the reader the question about the inflationary impact of wages appears to be poetic since, except for the initial period of industrialization, the price level showed great stability un-

til the late 70s in most of the economies under study. Beside the known economic reasons this is attributable also to the fact that till this very day stability of the consumer price level is interpreted in most socialist countries as a sign of the efficiency and stability of the economy. The book emphasizes that the causes of a considerable rate of inflation in the Soviet Union of the 1930s and in the East European countries adopting the Soviet type of growth in the first half of the 1950s can be found in exaggerated growth ambitions as well as in stepped-up and disproportionate economic growth. It is a somewhat disputable statement by the author that the powerful increase of the price level was not an instrument for draining the purchasing power but an outcome of the economic policy imposing fast industrialization. For example, the Hungarian experiences show that intensive raises of the price level through central measures played an important role among the instruments used for draining the purchasing power deriving from a substantial growth of the wage-bill, a product in part of the excessive hiring of labour who could not be employed efficiently and in part of the wage-raising tendency that manifested itself in loose work norms "controlled from below".

An interesting contribution is given by the part of the book treating the change in the standard of living policy during the 1950s, in a period lasting only a couple of years in most countries but until the early 1960s in others, and which actually meant to find the socialist way of raising the standard of living and real wages not through raising the nominal wages but through a systematic reduction of the consumer price level. The feasibility of this policy naturally implied a money reform and a comprehensive price reform whereby the initial prices were set unreasonably high so as to be able to afford the decrease.

Along with a relative stability of the price level the analysed countries were plagued by a trouble of perhaps still graver implications: of disguised or suppressed inflation. Shortage was typical of the normal state of the economies – as already stated by several theoretical and empirical studies – and this manifested itself in the forms of forced substitution, forced savings, black markets and queues. Concerning the disguised inflation typical over the whole period as well as the modest increase of the price level the responsibility of the increase of wages for this process may be questioned – hereinafter the author investigates this point.

The study shows by demonstrating a rich base of statistical data that the cause of inflation was not rooted in excessive and unjustified wage increases for on macro level the rate of wage increase was lower than the growth rate of productivity – the basic cause was to be found in the type of the economic policy and its assertion was only enhanced by the wage increase. Since wage increases have their own rules – the average wage increases with the growing share of qualified employees – this, too, added to the inflationary pressure. The higher than planned rate of employment, also stimulated by exaggerated plans of production and by the low wage level, similarly made its contribution to inflation. In practice, as analyses show, the different types of wage control have stood the test well as instruments of arresting inflation. (The purpose of amending them was rather a fuller accomplishment of the incentive tasks of the system.) The controlling of wage trends is carried out also through other channels than wage regulation (e.g.: the primary objective of trade unions is to guarantee the implementation of planned production and not to press for wage increases), and so there is hardly any way to break through these barriers; smaller groups have the opportunity to appreciably increase the wages rather by circumvention and abuse.

However, it is interesting to examine the potential inflationary hazard of the various systems of wage regulation, the subject of the conclusive part of the book. This question can be decided on basis of the extent of linkage between wage increases and a better satisfaction of consumer demands, furthermore, of the ability of the built-in regulatory tools of the system to prevent transgression of the wage bill. In the direct systems where wage increase is independent of market sales, the potential risk of inflation linked to other indicators is higher than in indirect or mixed systems where wages depend on the profit or of the success of marketing. Shortage and the monopoly position of sellers are typical in the socialist countries irrespectively of their system of wage control and so the wage increase linked

to market conditions does not always correspond to real output.

The book gives a good summary of the several decades long discussions about the wage control systems: comparison of the deficiences of wage--bill or the wage-level regulations; the indicator with which the formation of wages may be associated; preference for differentiated or uniform regulation: the system of taxation.

In practice wage bill regulation is linked to the direct system and the wage level regulation to the indirect system of economic control. For the companies determination of the wage-bill in absolute figures or in relative terms implies the determination of certain performance indicators and the smuggling back of the plan indicators. This is the reason for the strong resistance to the partial restoration of wage-bill control in the 1970s when the Hungarian system of wage control was amended.

The historical analysis of the systems of wage control of socialist countries makes it clear for the reader that the development of the process is slow and concerns only a few partial elements. In the direct systems amendment means elimination of distortions (freeing the indicator that determines wage formation from cumulation, and narrowing the scope of manipulation). The indirect or mixed systems, too, are laden with elements the enhancing of which work towards enforcing the central will. The slighest upsetting of the equilibrium or even its risk, any differentiation emerging in the chances of enterprises to increase wages, trigger central interference, the application of brakes and adoption of direct elements, even though the alterations are often pretended to be development or enhanced adaptation to the market and to demand. Wage control appears to be a subsystem of regulation that can be the most easily amended and shows the quickest result, and therefore it is a faster and from the point of view of central authorities a safer way of reaching apparent equilibrium than the changing of the supply side, i.e., of production.

K. SZÉKFFY

BORCHARDT, W.–DIETSCH, U.–BOLZ, K.: *Wirtschaftsbeziehungen und Entspannungspolitik. Das Beispiel der ungarischen Westwirtschaftsbeziehungen.* Hamburg, 1980. Verlag Weltarchiv GmbH. 380 S.

Der Absicht der Autoren und dem Zweck der Forschung, deren Ergebnisse im vorliegenden Buch zusammengefaßt sind, soll Anerkennung gezollt werden: es geht hier nicht um die Wiederholung längst bekannter Erfolge und Schwierigkeiten der Ost-West-Zusammenarbeit, auch nicht um die Ergänzung des seit der zweiten Hälfte der 60er Jahre entstandenen Gesamtbildes durch neue Einzelheiten, Teilaspekte und statistische Daten. Das Buch fragt nach der längerfristigen Wirkung der Ost-West-Zusammenarbeit auf die Friedensordnung in Europa und – am ungarischen Beispiel – auf die Gesellschaftsordnung Ungarns, eines sozialistischen Landes. Es kann an der Aktualität des Themas nicht gezweifelt werden, auch wenn bestimmte Prozesse in Europa und in der Welt nicht den vorausgesagten Weg genommen haben und die allgemeine Lage heute etwas anders ist als zur Zeit der Verfassung der Studie.

Das erste Kapitel führt in die Problematik der wirtschaftlichen Ost-West-Beziehungen und des friedlichen Wandels in Europa ein. Es behandelt die Vorgeschichte nach dem zweiten Weltkrieg ausführlich, weist auf das dialektische Verhältnis zwischen Wirtschaft und Politik hin und stellt die Abhängigkeit als Kernfrage der Untersuchung dar.

Die folgenden vier Kapitel untersuchen Ungarns Westwirtschafsbeziehungen. Zunächst werden Ungarns Motive und Ziele bei der Entwicklung intensiver ökonomischer Westbeziehungen geschildert und es wird festgestellt, daß die letzteren der ungarischen Wirtschaft bei der Erreichung bestimmter wirtschaftspolitischer und sozialer Ziele helfen. Mit Recht betont das Buch,daß „das permanente Eintreten Ungarns für eine politische Entspannung zwischen Ost und West ... bei diesem Land wohl in besonderem Maße ökonomisch motiviert" ist (S. 67).

Im dritten Kapitel versuchen die Autoren die theoretischen Hypothesen mit praktischen, statistischen Angaben zu untermauern. Sie untersuchen die außenwirtschaftliche Verflechtung der ungarischen Volkswirtschaft, insbesondere die Entwicklung der Wirtschaftsbeziehungen zu den OECD–Ländern. Sie gehen auf die Warenstruktur der ungarischen Aus- und Einfuhren ein und stellen internationale Vergleiche an.

Das vierte Kapitel ist einer der zentralen Abschnitte der Studie. Es versucht den Einfluß der Westwirtschaftsbeziehungen auf die ungarische Wirtschaft zu quantifizieren. Zusammenhänge zwischen Westwirtschaftsbeziehungen auf der einen Seite und gesamtwirtschaftlicher Produktion, Investitionstätigkeit, Lebensstandardentwicklung auf der anderen, werden festgestellt. Besonders beachtlich sind die Darlegungen, die der Strukturuntersuchung der ungarischen Investitionstätigkeit entstammen. Die Ergebnisse dieser statistischen Bestandsaufnahme lassen einige Schlüsse auf die ungarische Wirtschaftspolitik bzw. auf die Stellung Ungarns in der Weltwirtschaft zu ziehen. Nach der Meinung der Verfasser befindet sich Ungarn „in einem Spannungsfeld zwischen west-östlicher Zusammenarbeit und RGW-Integration" (S. 183), das durch vermehrte Westwirtschaftsbeziehungen in den letzten 10 Jahren gekennzeichnet ist. Gleichzeitig wird darauf hingewiesen, daß die ungarische Zielsetzung, eine an Weltmarktbedingungen orientierte Exportstruktur herauszubilden, den RGW-Bindungen der ungarischen Volkswirtschaft nicht unbedingt widerspricht, denn beide Märkte weisen nicht nur unterschiedliche, sondern auch eine Reihe ähnlicher Nachfragemerkmale auf. Sich für die engere und organischere Einbindung in die weltwirtschaftliche Arbeitsteilung auszusprechen hat selbstverständlich Konsequenzen, die einerseits und wahrscheinlich auf längere Sicht in höherer Effizienz, vermehrten Wettbewerbsvorteilen, größerer Leistungsfähigkeit der Wirtschaft zum Ausdruck kommen sollten, andererseits – und schon innerhalb einer verhältnismäßig kurzen Periode – negative Wirkungen bemerkbar machen. Die letzteren können dann nicht nur den bereits erreichten Stand der Wirtschaftsbeziehungen in Frage stellen, sondern auch die Wirtschaftsstabilität Ungarns gefährden. Wirtschaftlich destabilisierend wirken die Preiserhöhungen, die in einer in die Weltwirtschaft integrierten Volkswirtschaft nicht, bzw. nicht vollkommen aufgefangen werden können. Diese Tatsache besagt aber noch keineswegs, daß das eventuelle Auffangen dieser „schädlichen" Einflüsse nicht noch größere destabilisierende Kräfte in anderen Bereichen freisetzen würde (starre und verzerrte Produktionsstruktur, mangelnder Wettbewerb, wegen Kapitalknappheit zurückgehende Investitionen, usw.).

Das fünfte Kapitel widmet sich einer sozio-politischen Untersuchung der Westeinflüsse, und zieht die zeitgenössische ungarische Literatur heran. Die Übernahme westlicher Werte – sowohl in der wirtschaftlichen Tätigkeit (z. B. höhere Leistung mit modernen Maschinen) als auch im gesellschaftlichen Leben (Demonstrationseffekt, Statuskonsum, usw.) – steht mit den sozialistischen Grundideen – nach der Meinung der Verfasser – nicht im Einklang. Der westliche Einfluß kommt aber nicht nur durch die unmittelbaren wirtschaftlichen Kontakte nach Ungarn, sondern auch durch verschiedene andere Kanäle (Tourismus in beiden Richtungen, Kommunikationswege, usw.).

Die letzten vier Kapitel bringen die Zusammenfassung der empirischen Untersuchungen. Zunächst wird die Abhängigkeit als Grundproblem betrachtet, und danach gefragt, ob die bisher entwickelten Beziehungen die ungarische Volkswirtschaft, sowie die ganze Gesellschaft, eventuell den politischen Entscheidungsprozeß nicht in eine einseitige Abhängigkeit gebracht hätten. Eine ziemlich lange und nicht immer ganz klare Analyse endet mit dem Schluß, daß „der politische und ökonomische Spielraum der ungarischen Partei- und Staatsführung . . . relativ gering" sei. „Zwar sind die Möglichkeiten, der Herausbildung von Abhängigkeiten als unerwünschte Folgewirkungen der intersystemaren Wirtschaftsbeziehungen vorzubeugen, bzw. entgegenzusteuern, für Ungarn größer als etwa für die meisten Entwicklungsländer, aber eine partielle Abhängigkeit läßt sich aufgrund der asymmetrischen Grundstruktur der Ost-West-Beziehungen, die in den Wirtschaftsbeziehungen besonders deutlich zutage tritt, kaum verhindern" (S. 277–278).

Das siebte Kapitel untersucht die Westwirtschaftsbeziehungen nach ihrer systemstabilisierenden, bzw. systemgefährdenden (systemver-

ändernden) Wirkung, und stellt fest, daß die erste gegenwärtig vorherrscht. Man kann den Autoren zustimmen, wenn sie behaupten, daß Ungarn eine scharfe Abgrenzung auch im Falle negativer Einflüsse ablehnt, und um die positiven Elemente der Westwirtschaftsbeziehungen aufrechtzuerhalten höchstens an der Milderung unerwünschter Folgewirkungen interessiert ist.

Das achte Kapitel behandelt die Aufnahme (Perzeption) der Wirkungen von Westwirtschaftsbeziehungen auf die Ungarische Volksrepublik von den Ungarn selbst, und unterscheidet zwei Hauptrichtungen, bei denen die eine die Stärkung der ungarischen Teilnahme an der internationalen Wirtschaft betont, die andere mehr auf die Gefahren (und nicht nur auf die wirtschaftlichen, sondern auch auf die sozialen und politischen Negativwirkungen) aufmerksam macht. Die Voraussage der Verfasser rechnet mit der weiterhin vorherrschenden Position der ersten Konzeption.

Im abschließenden Kapitel verbinden die Autoren die in der ungarischen Fallstudie gewonnenen Ergebnisse mit den Rahmenbedingungen eines gesamteuropäischen (intersystemaren) Friedenssystems. Sie unterstreichen die stabilisierende Wirkung vermehrter Ost-West-Wirtschaftskontakte auf das politische Gesamtbild. Gleichzeitig plädieren sie für entsprechende multilaterale Institutionen, die einerseits diese Kontakte weiter fördern und in einen mit den sich ändernden spezifischen Interessen Schritt haltenden Rahmen einfangen können, andererseits die zweifelsohne aufkommenden Gefahren (destabilisierende Effekte) ständig unter Kontrolle zu halten fähig sind, da – und auch hier kann man mit den Verfassern einer Meinung sein – „eine ukontrollierte Ausweitung der Beziehungen ... politische Reaktionen heraufbeschwören" würde, „die zweifelsohne zu einer Gefährdung des erreichten Niveaus in den intersystemaren Bezichungen – nicht nur der Ungarischen Volksrepublik – führen müßten" (S. 347).

Beim Lesen dieses interessanten, mit großem statistischem und literarischem Aufwand geschriebenen Buchs sind im Rezensenten einige kritische Bemerkungen formuliert worden. Sie beziehen sich auf den Zeitfaktor, auf die Handhabung der konsultierten ungarischen Fachliteratur, sowie auf einige Sachfragen.

Laut der Einleitung wurde die Untersuchung Ende 1979 abgeschlossen, in einer Periode also, wo sich bestimmte, von den vorangegangenen Jahren abweichende Tendenzen der wirtschaftlichen Entwicklung in Ungarn bemerkbar machten. Einen Teil dieser Trends hätte man auch statistisch nachweisen können, leider reicht das statistische Beweismaterial nur bis 1976. In der zweiten Hälfte der 70er Jahre haben sich neue, auch qualitativ andere Aufgaben entwickelt, auf die die ungarische Wirtschaft noch entsprechende Antworten geben muß. (Ein wesentlicher Teil dieser Antworten läßt sich bereits in der Wirtschaftspraxis verfolgen.)

Gleichzeitig sind die wichtigsten Diskussionsthemen, auf die sich die Verfasser berufen, keineswegs aus der Literatur „verschwunden", im Gegenteil, die Diskussion ist härter geworden und die Formulierung fällt klarer aus als früher. Diese Lage würde heute eine differenziertere Forschung ermöglichen, sie hätte aber auch anhand der herangezogenen Literatur nuancierter vorgehen können. Insbesondere bei der Gegenüberstellung von „wirtschaftlichen" und „soziopolitischen" Annäherungen ist die Klassifizierung und die Beurteilung allzu schematisch; mehrmals befinden sich Vertreter unterschiedlicher, ja manchmal grundverschiedener Konzeptionen in derselben Gruppe. Die Verfasser haben die einschneidende ungarische Literatur studiert, was positiv bewertet werden muß; wir vermissen jedoch eine kritischere (quellenkritische) Haltung gegenüber den mannigfaltigen Meinungen.

Diese Forderung scheint um so mehr berechtigt, denn ihre Erfüllung hätte einige – teilweise kardinale – Sachfragen eindeutiger klären können.

Zum ersten: die Intensivierung der Wirtschaftsbeziehungen zu den OECD-Ländern, die Vertiefung der internationalen Arbeitsteilung, die entsprechenden binnenwirtschaftlichen Schritte (z. B. größerer Spielraum der Unternehmen, Förderung der Differenzierung, Anerkennung höherer Leistungen, Exportorientierung, Wettbewerbsfähigkeit) – auch wenn sie teils durch äußere, von Ungarn kaum beeinflußbare Vorgänge ausgelöst worden sind – drücken die heute vorherrschende Ansicht aus, nach der die erhöhte Wirtschaftsleistung die solideste und unentbehrliche Grundlage der Stabilität des sozialistischen

Systems ist. Ohne höhere Leistungen und größeres Wirtschaftspotential, bzw. durch Maßnahmen, die anderswo auftretende negative Einflüsse durch die Verminderung der wirtschaftlicher Leistung eindämmen wollen, mußte man mittel- und langfristig größere Schwierigkeiten und einen viel zu hohen Grad der Instabilität in Kauf nehmen.

Zum zweiten: die Frage der Abhängigkeit stellt sich für die ungarische Wirtschaft nicht in dem Sinne, wie sie in der traditionellen „Dependenztheorie" vorkommt. Erstens ist die ungarische Wirtschaft besser und tiefer strukturiert als die der zum Vergleich herangezogenen Entwicklungsländer, zweitens ist es im Lichte der letzten Entwicklungen fraglich, inwieweit alle Entwicklungsländer noch in einseitiger Abhängigkeit von den großen Industriezentren leben, drittens – und vor allem – bietet sich für die ungarische Wirtschaft keine andere Alternative. Sich abzuschirmen, zurückzuziehen, nationale oder regionale (RGW-) Autarkie zu betreiben ist nämlich keine Alternative. Deswegen ist für Ungarn die „Abhängigkeit" kein pejoratives Wort, kein an und für sich Negatives, und deshalb ein zu beseitigender Umstand, sondern eine tagtägliche Realität, ohne die die ungarische Wirtschaft nicht existieren kann. Die akzeptierte und praktizierte Außenwirtschaftsstrategie will nicht „Abhängigkeiten" abbauen, sondern neue „Abhängigkeiten" schaffen, die nicht nur neue (fremde und unerwartete) Einflüsse mit sich bringen, sondern hauptsächlich einen neuen und größeren Spielraum und bessere Entfaltungsmöglichkeiten bieten. In der Wahrnehmung und Ausnutzung dieser Möglichkeiten sollen die Kräfte und Mittel konzentriert werden.

Zum dritten: theoretisch kann man zwar den Verfassern zustimmen, daß die negativen Einflüsse der Westwirtschaftsbeziehungen die sozialistischen Staaten und die intersystemare Zusammenarbeit gefährden könnten. Die alltägliche Erfahrung zeigt jedoch, daß diese Gefahren viel größer sind, wenn man auf diese Zusammenarbeit verzichtet. Abgrenzung und Abschirmen würden in der heutigen politischen und wirtschaftlichen Situation die Ost-West-Wirtschafts- und politischen Beziehungen in einem viel größeren Umfang belasten als die Intensivierung der Kontakte. Und nicht nur wegen der politischen Ereignisse und wirtschaftlichen Prognosen an der Schwelle der 80er Jahre, sondern auch deshalb, weil die Westwirtschaftsbeziehungen – als Ergebnis der 70er Jahre – nicht mehr „zusätzliche", „substituierbare", „vernachlässigende" Elemente der Wirtschaftsentwicklung sind. Sie haben sich im Prozeß der wirtschaftlichen Reproduktion fest verankert – die meisten sozialistischen Staaten in Europa gründen ihre Wirtschaftsstrategie auf diese Erkenntnis. Sie sollte auch in den westeuropäischen Wirtschaften das statistisch – aber vielmals nur rein quantitativ – geringere "Abhängigkeitsgefühl" überlagern und den Ost-West-Wirtschaftsbeziehungen zu einem neuen und dauerhaften Anlauf verhelfen.

A. INOTAI

BOOKS RECEIVED*

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J. HOÓS

CHARACTERISTICS OF THE NEW GROWTH PATH OF THE ECONOMY IN HUNGARY

Experience gained over the last years concerning the development of the Hungarian economy has proved that the economy should be set on a new growth path quite different from the earlier one. In this context the author criticizes two extreme opinions. The first declares the importance of fast growth rate absolute and would insist on it even if it were accomplished by producing unsaleable products. The other extreme opinion undervalues the importance of growth rate and would totally subordinate growth to the aspects of equilibrium, being unaware of the fact that establishing and maintaining equilibrum also require growth in some degre. Both opinions have their failing for concentrating only on growth rate and not on its inherent relations. The essence of the new growth path is, though, not growth rate but its different content. Main characteristics of this content are: adjustment to the possibilities of realization on markets with higher quality requirements and increased consideration of international trade. The increasing dependence of growth on foreign markets may increase fluctuations in growth and renders the planning and control of economic growth more difficult.

Some theoretical aspects of economic growth

In formulating economic policy generally valid laws of economic development must be carefully weighted, with due consideration of domestic conditions. A correct assessment, measurement and evaluation of economic growth and identification of the major factors determing it are particularly important. There are several opinions and conceptions about these questions; however, there are a few important contentual elements deserving special attention from the point of view of economic policy and economic control which are judged with basic unanimity.

Economic *growth* is a determining factor of economic *development,* yet the connection between development and economic growth is not mechanical at all. Development in the proper direction is possible with a slower growth rate and *vice versa.* For example the public atmosphere and the way of life may improve even under the conditions of a relatively modest growth. The way of life may become richer and development more rational even with a slower increase of wealth, provided that consumption is humanized and more sensible use is made of material wealth. And, conversely, the drive after acquisition of material wealth at any cost might quickly bring richess and dynamic growth while the quality of life and social progress are unsatisfactory.

This in itself indicates that growth is really not at all easy to measure or to qualify.

The growth process of national economies is closely linked to world economy and to the international flow of commodities, money and credit. The direction of volume,

value and price changes is not always the same. It is therefore especially important to estimate the volume and composition of produced and realized resources created by growth*, as a very result of production for the market and also under the influence of circumstances in world economy and foreign trade.

If there are major price changes in foreign trade the produced and the realized resources may namely diverge. For example, when an economy has attained an excellent improvement in the terms of trade, then the benefits resulting from price changes in foreign trade may add much to the produced resources. The case is the reverse when the terms of trade worsen. When qualifying growth it is not less important to consider the structure in which production is expanded and whether it corresponds to actual needs. In this respect the way in which *stocks* (inventories) are formed is of distinguished importance. For instance, a significant increase of stocks may add to the dynamism of growth, but when the increase of stocks means a provisional or lasting freezing of resources created then the satisfaction of needs will not grow in proportion with production. It follows that a more modest growth rate with controlled expansion of stocks might be more advantageous than relatively dynamic growth with excessive stockpiling.

As far as the factors determining economic growth are concerned, it will be convenient to distinguish these working mainly over the longer term from those mainly active in the short run. Over the longer run economic growth depends on technical progress, the amount and skills of available labour, the volume and composition of capital goods, as well as on the standards and efficiency of economic management. Further important factors are the natural and geographical conditions as well as the degree to which benefits from international economic integration can be realized. Over the longer term the first noted four factors are the ones affecting growth basically, but their impact can be greatly accelerated or impeded by the two latter ones. (This is illustrated by the example of the oil producing developing countries.) The more advanced an economy is the more powerful is the effect of international economic integration on its growth.

Over the short term, especially for open economies which are strongly dependent on foreign trade, the opportunities for an economical realization of export and, in this context, for adequate import, as well as the equilibrium of external trade are vital factors of growth. When the chance of economical sales in foreign markets is limited dynamic growth can be provisionally maintained at the detriment of external equilibrium. However, this type of growth will sooner or later run against a barrier set by the obligation to pay back credits. Without the opportunity to increase efficient export, the use of external sources does not create the additional resources that would be needed to meet international liabilities and it will not be possible to maintain such low-efficiency growth without using ever increasing amounts of external funds, but this practice certainly cannot be perpetuated. The repayment of external resources availed of earlier will namely divert more and more means away from the satisfaction of domestic needs and will sooner or later force the curbing of the growth rate of production and of consumption.

*Its exact statistical measurement is a difficult and a not quite accomplished task.

If, then, an economic policy not reckoning with the poor opportunities of efficient export or the drawing in of external resources allowing that last too long, the restoration of external equilibrium may well necessitate the halting of growth and perhaps even a setback of production. Consequently this way of accelerated growth or the maintenance of a higher than realistic growth rate will necessarily hit back and production will be inescapably slowed down.

Equilibrium problems nevertheless express the failure of the economy to assert its factors of lasting growth efficiently and to utilize them in a way that the economy can manufacture profitably selling goods. All these indicate that a close relationship exists between the factors determining economic growth in the long term and shaping it in the short term and the two cannot be strictly separated. For example it can not be taken for granted that the provision of an economy with plenty of labour, productive capacity and investment resources will automatically result in rapid growth. For if it is not possible to realize commodities produced and services at adequate price then, though the volume of commodities produced will increase, the satisfaction of needs will not increase in proportion. It is typical of such growth that inputs increase at a higher rate than the income resources that actually guarantee the satisfaction of needs. Under such circumstances it may be reasonable to give up the full exploitation of certain growth factors until exploitation becomes efficient. Growth can become faster again when efficiency has been enhanced. A provisional restoration of the external economic equilibrium can be though attained for once without any substantial increase of efficiency if import is strongly controlled by the powerful curbing of growth and if resources are released for export by the limitation of domestic use. However, this type of restoration, similarly to growth accelerated at the expense of equilibrium, cannot last long, because it is similarly not based on more efficient management. So, it may be said that *external equilibrium cannot be mechanically subordinated to the growth rate but the growth rate cannot be subordinated to external equilibrium either.*

It will be also interesting to note another interrelation, i.e., that the formation of a trade surplus might slow down economic growth when a part of resources produced at home is utilized abroad through the granting of credits and thus the rate of expanding domestic producing capacities is moderated. However, the domestic resources will be increased by the credits when they are paid back and thus the conditions of expanding capatities and accelerating growth will be improved.

Main features of the new growth path of the Hungarian economy

The experiences of past years clearly affirm the conclusion that the Hungarian economic development must be shifted over to a new growth path substantially different from the previous one, because of both the external and the internal economic conditions. Everybody agrees with this requirement *in general,* but opinions rather differ about

the actual interpretation of the new growth path. Two extremes of these opinions are worth of discussion; they show the common trait of essentially identifying the new growth path with the growth rate.

According to the first assumption it will always be possible to attain a rate still regarded as dynamic, which provides the sufficient amount of resources for expanded reproduction and for the modernization of the economy and, simultaneously, for the raising of the standard of living. The representatives of this concept claim this is the only way to maintain the necessary intensity of financial incentive. The concept practically implies that it is up to the economic control organs to determine the rate of economic growth and that they will always be in a position to realize a growth rate in accordance with expectations. This concept is strengthened by the natural and general striving after a higher standard of living which, logically, demands growth. It is an – usually justified – anxiety of theirs that the standard of living would be marred by lower growth rate. In the firm belief that relatively rapid growth can always be attained, they actually deny the need to contain the objectives of the standard of living policy and of the development policy.

The representatives of the other extreme concept underestimate the importance of the growth rate and set equilibrium requirements in the foreground by mechanically subordinating growth to equilibrium considerations and would impose equilibrium even at the detriment of efficiency. They fail to realize that the rate of growth can be decelerated along with an unjustified forced restoration of equilibrium (just as it can be accelerated at the expense of equilibrium). However, extra resources will be made available by a radical curbing of growth only for a transitory period of time because in the long run the necessary resources must be produced by growth itself. When this point is missed it will also be easily forgotten that a slackening of the rate of economic growth may well be an indication of growing inefficiency in economic control and management activity.

The first concept is dangerous because it would force growth and would expect a higher rate than objectively possible. The risk of the second concept is its being likely to kill even the efficient endeavours required for attaining the realistic growth rate. The first one overestimates and the second one uderestimates what the Hungarian economy and society may be realistically expected to perform under the present conditions, as well as the external and internal implications of this performance. That is, both concepts show the weak point of concentrating on the *rate* of growth and not on its contentual connexions. Whereas the main point of the new growth path is exactly not the rate but its new content against the old ones. From content follows the rate, that is, the rate is a result and not a determining factor. The major characteristics of this content could be summarized as follows:

– the growth of the Hungarian economy will be determined in the future mainly by the sales opportunities in markets setting higher quality requirements (up-to-dateness, fashion, flexibility, accuracy, price, cost and profitability aspects);

– economic growth will become more sensitive to external economic impacts and growth will more directly and powerfully affect the external equilibrium of the economy; the degree of business efficiency will be shown more pronouncedly in the state of equilibrium of the economy.

It is these interrelations that lie in the background of the current disequilibrium problems of the economy, too. The main reason of disequilibrium is not the temporary overconsumption shown in past decades but the fact that the Hungarian economy was still going along the old growth path for a relatively long period of time when it should have already shifted over to the new path. The prolonged disequilibrium has also been due to the long time required for shifting over to the new path because not simply the growth rate of consumption has to be controlled but also the factors of lasting and long-range growth have to be set into much more efficient action with all the significant changes they entail with respect to structure, organization, management and, last but not least, conception and approach.

Some further essential features of the new growth path, different from the old features, follow from the aforesaid and determine the new growth path from several points of view.

Unlike the way of the past three decades, economic growth in Hungary is more and more pronouncedly transforming into *demand controlled* growth. This is shown clearly by the openness of the economy: in 1979, total export was more than half of the national income and the ratio of the increment of export to the increment of national income forecast for the period 1981 to 1985 will be even higher, in the range of 70 percent. If we fail to dynamically expand export sales then the growth of production will loose from its dynamics. Consequently, the factors of production, although still remaining to be decisive factors of growth, will only set the potential ceiling to growth but actual growth might fall short of that. In the past neither the CMEA nor the world market could set such decisive barriers from the point of view of increasing production since demand significantly exceeded the supply by producers and a good part of effective demand was left unsatisfied. Along with its advantages (e.g. the relatively simple feasibility of full employment), such type of growth is known to have grave disadvantages as well (producers are pampered, there is little incentive to satisfy quality requirements and to rationally use the resources, there are greater losses in the process of work and in investment). The changing of the type of growth is necessary among others for the very purpose of cutting down these losses, substantially promoting efficiency, and satisfying buyers' demand for a higher degree of quality. All the above can lend the socialist management qualitatively higher marks and might bring about its revolutionary development.

The task is not merely to control economic growth in the future in accordance with demand: it must be controlled by *efficient* demand, that is, demand we are able to satisfy at acceptable prices and at smaller costs than the prices we can reach. It is becoming a more and more rigorous expectation that economic growth must result beside the volume of production also in sufficient incomes (e.g. adequate terms of trade and a satisfactory

proportion of gross to net output). Beside the supply of basic materials and primary energy, technology and labour required for growth, it will become a more and more vital condition to utilize them with the best possible efficiency and cost and price terms.

As a consequence it will be more and more frequently necessary to face the decision whether it is worth while to fully exploit the available factors of production. It will remain a valid basic economic theorem that it is better to make efficient use of the resources than to let them go idle. However, it will be at the same time completed by the statement that it may be better to leave certain resources unutilized than to operate them with poor efficiency. It follows that bigger reserves of labour and capacity will be at the disposal of the economy to mobilize. Thereby the adaptivity of the economy will be enhanced and this in itself can cause an enormous improvement in efficiency. At the same time, however, significant structural problems might accumulate and it will become a more important task to solve problems and relieve tensions originating from non-utilization.

On the new growth path, owing to the fact that the growth rate cannot be speeded up through the expansion of labour and the increasing of investment resources, the rate of economic growth will be set rather by technical progress providing for a better satisfaction of demand than by the volume of new resources. Resources undoubtedly are not going to be abundant in the coming stage either, but the available resources will only bring about accelerated growth if they are coupled with an adequate efficiency of technological development and marketing work. The struggle still going on with great intensity for the acquisition of extra resources will thus become unreasonable. It is no longer the lack of resources but the inefficient use of the given resources that is the main reason of economic troubles and growth problems in some fields. For example it is not absolutely sure that investment clearly serves the future. The resources from additional accumulation can impart sufficient dynamism to growth only with efficient technological development and marketing work.

In the future economic growth will be much more differentiated. As against general growth covering every field, a significant part of economic units will show a stagnation or even a decline of production. At the same time stagnation or reduction of volume of production do not exclude but rather imply the improvement of efficiency, profitability and qualitative advancement.

The measurement and interpretation of differentiated growth based on the improvement of quality, efficient technological development and successful marketing work will also require a new approach. One of its typical characteristics is the increasing role of value processes as against volume processes. The same result of production will be qualified differently depending on the inputs of energy, materials, capacity and labour. The available resources must be translated into more and more valuable products and services that guarantee higher income.

The growing dependence of growth on foreign markets also implies that any fluctuation in the growth rate will more strongly depend on external economic factors than on internal circumstances of business management. Previously such fluctuations used

to be related firstly to the investment cycles and through that to the different "model points" of decisions on medium-range plans (usually to the date of passing or of accomplishing of plans). Although the above, too, were in connection with external economic impacts, the connection was asserted decisively through investment. However, now and in the future the growth rate will adjust basically to the general conditions of the external markets, to the terms and volumes of Hungarian sales in foreign markets. In this respect the strengthening of such impacts of capitalist world economy may be expected.

All that make the planning and control of economic growth more difficult and complicated and call for more flexible, open, and at the same time continuous economic control and planning. The principle of planning and control formulated after 1978 have to be more consistently enforced, particularly the insistence on higher performances, a more marked differentiation based thereon, a more effective coordination of central control (planning, regulation) with enterprise autonomy and initiative, a deliberate risking of conflicts that promote and accelerate positive development and their solution through planning. The institutional and organizational system of the economy must be also developed in accordance with these. Foreign economic activities serving the economic policy will become even more important and influential. Significant tasks will have to be solved in changing the way of reasoning, especially in making the need to switch over to the new growth path accepted. Tasks of no smaller significance will be faced in formulating the more concrete directions of action and concepts of the economic policy and development strategy in the service of shifting to and proceeding on the new growth path as well as in creating the international and domestic conditions required for their realization.

The characteristics of the new growth path outlined above originate from the following:

– The opportunities and conditions of import from our major economic partners, the CMEA countries, have gone through substantial changes. The growth rate of envisaged raw material and energy imports will be lower than before; and in the future too, our demand for up-to-date technology will be satisfied only partly from this area. The consequential moderation of import dynamics will necessarily reduce the dynamics of export as well. Simultaneously, the import will have to be paid for at a steadily rising world market price level and with the export of products suitable for the satisfaction of increasingly rigorous specifications. The improving quality of suitable export commodities is a basic requirement. If we failed to export at satisfactory price and in satisfactory quality then on the one hand import might continue to slow down and, on the other hand, such losses would have to be suffered in the terms of trade as could strongly reduce the resources available for domestic consumption. We will have to deliver to CMEA countries goods of such quality and saleable at such prices as are suited for backing up the realistically feasible expansion of imports and for avoiding losses in the terms of trade or, when the latter is unavoidable as e.g. in the case of crude oil import, its worsening and thereby the relative decrease of resources.

– It will be an increasingly dominating rule in capitalist markets that imports will only be possible to maintain and expand if compensated by efficient exports. Only such exports can create resources which satisfy beside the necessary import also the requirements of the standard of living and development policies. The enhancing of uneconomical export does not bring extra resources to the country and a stepped-up export policy not sufficiently reckoning with inputs only does harm to the position of the national economy instead of improving it. Therefore in this relation it is vital to line up to higher requirements and to observe and satisfy the market requirements for the sake of economical export expansion.

– For a while there can be no, or only very slight, increase in domestic accumulation. Decisively because of the known equilibrium reasons, i.e., for the purpose of better external economic equilibrium, stagnation or minimum growth must be accepted both in personal consumption and investment as long as a satisfactory equilibrium of the external economy is not attained. The given structural conditions of the Hungarian economy, too, allow only a modest increase of accumulation since the share of economical production and export does not amount to a value that would allow highly dynamical economic growth. Consequently, it will be possible to speed up domestic consumption when, along with a more advantageous state of external economic equilibrium and a better structure, efficient production and export can dynamize also imports, creating extra resources through which it will be realistic and possible to increase the volume of commodities required for personal consumption and investment. But this will take time. Besides, it must be also borne in mind that domestic consumption, too, raises steadily increasing requirements and will raise still higher ones. The satisfaction of personal needs requires up-to-date consumer goods while the up-dating of production needs productive and top quality means of production. In case production failed to comply with these requirements the domestic market could also become an obstacle to growth just as the trade between Hungary and the CMEA and world markets.

Changes taking place in the conditions of growth are even more striking if they are compared with past years. During the period of nearly a quarter of a century import from socialist countries expanded rather dynamically and so did the import of basic materials and energy from that area. The development of turnover is illustrated by the following data:

This development of turnover mostly assured the material-technical foundation of the dynamic expansion of production until 1975 and in a way simultaneously creating a market: parallelly with the quickly expanding import of basic materials and primary energy, the market of export commodities also expanded. The dynamic increase of production could be backed up also from the side of labour and capacities. Thus until 1975 socialist import and export alone lent dynamism to production and indirectly to domestic consumption. At the same time both the socialist and the domestic markets were dominated by the basic necessities and consequently by quantitative requirements for a long period while the quality requirements have become more powerful only recently. Until the world market price explosion also the trend of prices had been

Table 1
Indexes of the volume of foreign trade turnover

Denomination	Socialist countries	Non-socialist countries	Total	Rouble settlements	Non-rouble settlements
			Import		
1980 in percentage of 1970	173.1	165.5	172.1	183.8	157.7
1975 in percentage of 1970	150.5	127.7	142.0	157.6	124.0
1980 in percentage of 1975	115.0	129.6	121.2	116.6	125.6
			Export		
1980 in percentage of 1970	232.5	182.0	220.0	217.7	209.5
1975 in percentage of 1970	171.2	117.5	156.7	167.1	140.2
1980 in percentage of 1975	135.8	154.9	140.4	130.3	149.4

Source: Hungarian Statistical Pocket Book. 1981. KSH. (142 p.)

advantageous for Hungary. But afterwards we could buy energy and basic materials from the socialist countries only at strongly worsening terms of trade and consequently with a rising stock of debts. Although in the world market more exacting requirements were applied even earlier, yet, decisively because of the relatively favourable conditions in the CMEA and in the internal market, the role of western export was much less significant in growth. Moreover, western export was easier than now because the world economy was not this badly laden with crises and the agricultural products, basic materials and manufactures at a low degree of processing, that represent a decisive share in our export, used to be exposed to less discrimination. At the same time favourable grounds were provided to our export of materials and semi-finished products by relatively dynamical CMEA imports. This import also contributed to expanding the commodity funds that could be realized in western markets. The abating growth rate of import from the socialist countries, the toughening of its conditions and the narrowing absorptive capacity of the domestic market brought a profound change in these favourable conditions of growth. While the expansion of commodity funds suitable for western export was reduced by the new state of affairs in import from socialist countries, the higher quality requirements raised towards our export to the socialist countries increased the need of western imports. At the same time, the share of manufactured goods and processed food products

increased in our western export and these products are much more difficult to sell profitably. Thus, the real expansion of production is indeed not possible without efficient (not least western) export and without meeting high quality requirements. That is, growth must be actually qualitative. This at the same time lends *determining and forcing* power to quality factors. Namely, when growth is of another type *the rate will necessarily slow down* with all the negative implications with respect to the standard of living and economic development. This same thing makes growth acutely "equilibrium sensitive": economic development on the new growth path is under the powerful and ever stronger influence of external economic conditions.

The objective need to set the Hungarian economy on the new growth path thus follows from the changing conditions of growth. The main characteristics and requirements of this path are known. When, how and in what way the economy, even if not the whole of it but some of its decisive fields can be put on the path is not yet known. A number of important steps were taken towards this end in 1979 and 1980 and the results are already showing (for example the accumulation of unwanted stocks has been reduced and the labour market and investment activity have become more balanced).

The formulation and approval for the economic policy guideline for the 6th five-year plan (1981–1985) was an important step but the difficult task of accomplishing the plan targets is yet ahead. Great help may be given to that by long-term planning now under process for the years 1981 to 2000 and especially by the analysis of the alternatives of development strategy and of partial concepts as well as by exploring their main feasibility conditions that may give guidance in current problems.

Growth rate of the Hungarian economy in the coming stage

What growth rate should the Hungarian economy prepare for in the coming stage? It is extremely difficult to plan or forecast the precise value of this growth rate for a longer term, as a number of essential conditions are not certain as yet, especially in international respects. Further analysis and knowledge demanding economic and political qualification are required also for the concrete statement of domestic development objectives that can be set realistically (for example concerning the actual industrial policy we ought to pursue). However, it will be fairly safe to state that

– economic growth will be most probably slower than it was in the years 1950–1960–1970;

– there is no alternative to the new growth path that could guarantee substantial and lasting development. The data shown in *Table 2* are a good illustration of the slackening of growth.

The basic cause of slackening beside the new external economic conditions is the more pronounced appearance of the requirements of qualitative, intensive growth. By advancing on the new growth path, even with a relatively quick structural development

Table 2
Annual growth rate of national income in Hungary

1950s	5.8 per cent
1960s	5.4 per cent
1971–1975	6.3 per cent
1976–1977	5.4 per cent
1978	4.0 per cent
1979	2.0 per cent
1980	–0.8 per cent
Plan for the 6th Five-year period (1981–85)	2.8 per cent

only a slower rate of development can be reached because of the depleted reserves of extensive growth and because of changing external factors. In case of a change of the type of growth, at the time of shifting to a new path when a major structural transformation must be necessarily carried out the rate is more powerfully reduced by structural problems.

The slowing down of economic growth was particularly remarkable in 1979 and 1980. In 1980, the slackening was attributable chiefly to market effects, namely, to the extraordinary narrowing of non-socialist export markets. (In 1980 export increased by a paltry 1.9 per cent and from this the increase was 2 per cent in case of socialist countries and 1.8 per cent in case of non-socialist countries.) At the same time the shortcomings of central control certainly contributed to this moderate growth. The growth rates of the past two years illustrate that the characteristics of the new growth path are practical realities in many respects already today and that the shift to the new path is imperatively necessary already now and not only in the future. It is not yet possible to make reliable estimates of the rate which the Hungarian economy will be actually able to reach on the new growth path in the long run (even if the objective and internal conditions and the reserves inherent in improved control and business management are all taken into account). This will require further practical experience and analytical work.

The question of the actually attainable rate is closely related to the statement that the new growth path has no alternative which would guarantee lasting development. This path must be taken even if analyses and evaluations show that maximum effort and full utilization of objective possibilities will not be enough for a substantial acceleration of growth for a provisional – several years' long – period of time. In such case it is the smaller evil if the economic policy puts up with objective facts and shapes growth in accordance with efficiency requirements instead of accelerating it at the detriment of external equilibrium. Such unfounded acceleration, as already explained above in the discussion of theoretical connexions, would not mean any real surplus of resources whereas it would conserve the uneconomical structure and the inefficient utilization of the factors of lasting growth and would ultimately drive disequilibrium to a degree where

its restoration would cost a serious break in economic development (radical decline of the growth rate and consumption) with extremely dangerous political risk.

However, it is another important requirement of the same rank as the above one that the economic management ought to utilize the objective opportunities of growth as well as the existing and mobilizable reserves of efficiency. Failure to do so would unreasonably impede not only growth but also the restoration of economic equilibrium, all the more as the extra resources whereby equilibrium can be reached and consolidated will have to be produced by growth.

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Indeed, many new requirements and phenomena are entailed by the new path of economic growth. Switching over to this path is a momentous and epoch-making change also from the point of view of its economic political and political bearing.

The shift to the new growth path is a necessary station of Hungarian development and this step cannot be avoided. The pursuing of the new path will be in many respects harder than it was to proceed on the old path of growth but by the nature of development it may bring more success and results. It is equivalent to the promotion of socialist economy into a class of higher qualitative characteristics of production and consumption. This step necessitates decisions which will be no less difficult than the earlier ones and which will occasionally trigger tensions. This must be taken upon ourselves together with undertaking the new growth path. Our attained economic development and experience learned in control and management in its course will surely provide the necessary basis and guarantees for stepping onto this path without too painful shocks and for progressing on it successfully.

ХАРАКТЕРНЫЕ ЧЕРТЫ НОВОЙ ТРАЕКТОРИИ РАЗВИТИЯ ВЕНГЕРСКОЙ ЭКОНОМИКИ

Я. ХООШ

В статье сначала рассматриваются теоретические взаимозависимости экономического роста. Автор констатирует, что хотя экономический рост и является определяющим фактором экономического развития, однако между развитием и ростом взаимосвязь не механическая. Развитие, помимо количественных факторов, зависит и от качественных, а также от динамики структуры расширяющегося производства, запасов и т. д. Далее необходимо различать факторы, действующие в первую очередь на более длительную и на короткую перспективу. На короткую перспективу исключительно важными факторами роста являются ориентация на рентабельный экспорт и — в связи с этим — обеспечение возможности надлежащего импорта. В том случае, если возможность рентабельного сбыта на внешние рынки ограничена, динамичный рост может обеспечиваться лишь в ущерб внешнему равновесию, такому росту, однако, раньше или позже будут препятствовать обязательства по возврату кредитов.

Хотя наличие первичных ресурсов (рабочей силы и производственных мощностей) является предпосылками роста, не всегда можно обеспечить их экономически эффективное использование. Поэтому есть случаи, когда обоснованно приходится отказываться от полного использования ресурсов.

Опыт развития венгерского хозяйства за последние годы подтверждает, что оно должно быть переведено на новую, существенно отличающуюся от прежней, траекторию роста. В связи с этим автор дает критику двум крайним соображениям: первым абсолютируется значение быстрого темпа роста: его якобы следует придерживаться даже в том случае, если этого можно достигнуть лишь путем производства нерентабельно реализуемых товаров. Другим крайним мнением недооценивается важность темпа роста, и рост полностью подчиняется аспектам равновесия: при этом упускается из виду, что восстановление и поддержание равновесия также требуют определенного роста. Слабым местом обоих соображений является то, что они концентрируют внимание на одном лишь темпе роста, а не на его содержании. В то же время суть новой траектории роста состоит не в его темпе, а в отличающемся от прежнего содержании. Главными характерными чертами этого содержания являются приспособление к возможностям сбыта на рынках, предъявляющих более высокие качественные требования; особо тщательный учет внешнеэкономических взаимосвязей. Экономический рост, таким образом, должен в растущей мере приспосабливаться к спросу, причем к спросу, который может быть удовлетворен с должной экономической эффективностью. При этом чаще следует отказываться от использования части ресурсов, если для их эффективного использования не представляется возможности. Вместо генерального, распространяющегося на все и всех роста в отношении значительной части хозяйственных единиц надо будет удовлетвориться поддержанием на уровне или даже сокращением производства.

Усиленная зависимость роста от внешних рынков может подействовать в направлении усиления его колебаний, и из-за этого будет труднее планировать рост и управлять им.

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I. T. BEREND

CONTINUITY AND CHANGES OF INDUSTRIALIZATION IN HUNGARY AFTER THE TURN OF 1956/57

After the shock of the tragic autumn of 1956, the new Hungarian government headed by János *Kádár*, sought the path of renewal in politics as well as in the economy. Amidst political struggles and debates, changes in economic policy emerged, while its continuity was preserved. The greatest changes were demanded by political necessities. This called decisively for a policy preferring a consistent raising of living standards and consumption, controlling excessive accumulation and industrialization together with an agricultural policy stimulating agricultural development, searching and finding new ways and solutions of collectivization. One of the most controversial fields of economic policy remained invariably the decisively important industrialization policy.

The serious economic and political consequences of the errors of the first five-year plan (1950–1954) soon made it clear that the industrialization concept of the 1950s needed revision and modification. Many an over-ambitious large-scale investment project simply could not be carried on and, at least temporarily, had to be freezed. The period between 1953–1956, however, only saw the reluctant and contradictory first steps of the inevitable reorientation; the laws governing the proportions of the so-called A and B sectors of industry (producing capital goods and consumer goods, respectively) were dogmatically and hotly disputed. I do not undertake to trace this in this paper. The present analysis sets out from the period following the autumn of 1956 when the renewed party and government leadership, having shed past burdens, made efforts to formulate an industrial policy better corresponding to the 'conditions of the country', taking into account profitability and export interests, breaking with past endeavours at autarky in manufactured goods. It became a central objective that "the industrial production–line should improve [1]", and that "the development of (Hungarian) industry should undergo radical changes ... and efforts should be concentrated on industries which already have adequate roots in the country ... and, on the other hand, which are not too energy-intensive" [2].

The concepts of industrial policy and of the transformation of the production structure were not formulated through theoretically founded research, but through practical planning based upon the principles derived from the lessons of previous mistakes and from the aims of the policy set forth. The following pages attempt to throw light upon this interesting period of Hungarian industrial policy and industrial development.

Priority of the energy and raw material basis

At the turn of 1956/57, realizing the conditions and the importance of proportionality, one of the most accentuated structural questions was establishment of harmony between industrial production and the energy and raw material basis. The priority of the fuel and energy basis of industrial development was underlined by Jenő *Fock* in his report at the May, 1957 session of the Central Committee of the Hungarian Socialist Workers' Party and by the expert committee of economists under the leadership of István *Varga* and István *Antos* as well, the latter speaking about the requirement of the "overall priority" of energy production in its proposal to the draft economic program of the government.

Attempts to enforce this tendency were made already in the year of reconstruction and stabilization, i.e. 1957: this was positively acknowledged by József *Bognár* in the parlamentary debate of the 1957 plan: "The draft plan correctly realizes the interrelation between industrial production, industrial development and a realistic energy and raw material basis. In our present situation . . . it is appropriate to provide bases for future industrial development by investment in the development of energy production." [3] During the preparation of the second three-year plan (1958–1960) one of the principal objectives of the structural transformation was formulated as follows: "Investment must be concentrated on the realization of the main objectives of the country. For this reason, such a development of the energy basis must be achieved as will possibly supply the national economy with energy after 1960 as well . . ." This was amended as follows: "Following from the nature of investment and from the directions of development, the largest amounts have to be provided for mining, electricity generation and for the continuation of investment into metallurgical projects already under way." [4]

It must be noted that the increased attention paid by Hungarian economic policy to the production of energy and raw materials was not merely drawn from the lessons of the almost overall scarcity during the forced industrialization campaign of the 1950s, of the energy situation that had turned critical by the mid-1950s. This endeavour was in full harmony with that generally prevailing in all East-Central European countries and with the efforts, being in the focus of the activities of the CMEA, at an adequate, harmonized supply with energy and raw materials. According to the Bucharest session held in the summer of 1958, "The attention of the CMEA and its organs has to be concentrated on widening specialization and cooperation of production, on the development of production in CMEA countries of raw and processed materials, especially of iron and steel, non-ferrous metals, chemical products, fuels, energy and agricultural materials, in order to satisfy the needs of the said countries to the fullest possible extent." [5]

During these years, according to the resolution of the 1957, Warsaw, session of the CMEA, already long-term forecasts and plans were prepared on, among other points, the development of Hungarian energy supplies. An approximately self-relying supply was, of course, no longer possible. While in 1955 about 88 per cent of energy consumption was covered by domestic production, this proportion was less than 84 per cent in 1958.

According to the computations of the National Planning Office, in turn, the total energy demand of Hungary was to grow by about 26 per cent by 1965, by more than 50 per cent by 1970, and by roughly 75 per cent by 1975 as against the level in 1958. (These planning computations assumed an annual growth of 3 per cent in energy consumption, while the forecasts of the UN (ECE) Senior Economic advisers assumed an annual growth of 4.5 per cent for Eastern Europe.) [6] Although at that time a constant, relatively moderate growth of domestic coal mining was envisaged, a growth of only slightly more than 40 per cent was regarded as possible in coal production by 1975. Consequently, it was held that the energy supply of the country was possible only through the increase of primary energy imports, especially that of oil. As against the 1125 thousand tonnes of crude oil imports in 1958, 2800 thousand tonnes were envisaged by 1970 and 4500 thousand tonnes by 1975. Following the quadrupling of imports a fundamental structural change of energy consumption was also forecast: the 19 per cent proportion of oil and natural gas was planned to increase to 37 per cent by 1975 [7].

These plans were in close relationship with the large-scale bilateral and multilateral development projects aimed at the solution of the energy supply problem on CMEA level. It was confirmed in the autumn of 1958 that "the main task is to realize cooperation of the energy systems and to increase the mutual exchange of electric energy". This initiated the multilateral linking up of the electric energy networks of Hungary, the Soviet Union, Czechoslovakia, Rumania, and Yugoslavia (complemented by negotiations with Austria in this subject). By 1965, Hungary reckoned with an electric energy import of 1.5 thousand million kilowatt-hours, in which the decisive proportion was the electricity shipment of the Soviet Union, starting with an annual 200 million kWh-s in 1962, planned to reach 1 thousand million KWhs by 1965 [8].

Following earlier declarations of principles, the building of the pipeline system necessary for the oil shipments from the Soviet Union was high on the agenda of the 10th session of the CMEA. According to the viewpoint of the Hungarian government, each country was to take part in the construction works according to the quantity of oil to be shipped to it. Hungary was to take part in the construction of the Southern pipeline capable of transporting 2.5–3 million tonnes of oil. However, as soon as at the end of 1958 she also announced its support for the construction of a second pipeline system after 1965 [9]. Thus, at the end of the 1950s large-scale plans were conceived about cooperation, and according to the energy program the realization of many of them was begun as well.

According to these long-term plans, during the years of the second 3-year plan, and the period of the second 5-year plan (1961–1965), the development of the energy basis remained in the focus and continued without interruption. While industrial production was planned to increase by 39 per cent, the production of electric energy was one of the prominent branches planned to reach an increase of 60–70 per cent. According to the report of the Planning Office, "a fundamental change is about to take place during the second five year plan": the participation of coal was to decrease and the proportion of oil and natural gas was about to increase rapidly. All this was related to the plans to

restructure the energy utilization of metallurgy and transport. This program was complemented by development plans for other industrial materials as well: "In order to further enhance the structure of industry, raw material production is to achieve the largest development within heavy industry during the second five year plan" – said the report [10].

Carrying on the metallurgical project

Hungarian planners were in an especially delicate position as far as the future of the development program of iron and steel production was concerned, which had become a symbol of the mistakes of the economic policy of the 1950s. Investment projects had to be suspended temporarily, as a matter of course, and the direction of development was abandoned. Iron and steel industry needed huge investments, it did not take into account the endowments of the country, and was the most material and energy-intensive branch of all; this branch had been one of the cornerstones of autarky and defense-oriented development. It was regarded by the 1956 debates on economic policy, to use the words of the December, 1956 resolution of the HSWP, as having been "forced" upon the Hungarian nation by the former economic policy.

Nonetheless a significant dilemma of economic policy emerged. A once-and-for-all discontinuation of the iron and steel program was not possible: huge sums had already been invested in the development of the branch and most of the projects were only halfready. It would have been, of course, absurd to waste all previous effort, to close down the already working metallurgical units.

This was a difficult dilemma and was fed from two sources. On the one hand, following from the highly material intensive and mostly one-sided heavy industrial development policy all CMEA countries suffered from a general scarcity of metallurgical products, thus, in the long run, the import of missing metallurgical products was not possible from these countries not demanding convertible currencies. This was made unambiguous already by the Spring, 1958 session of the CMEA. The preparatory paper of the standpoint of the Hungarian government put this as follows: "A significant scarcity of metallurgical coke, crude iron and rolled steel was pointed out both by the VII., Berlin session and by the discussions of the presidents of planning offices this year." According to calculations, 847 thousand tonnes of rolled steel and 172 thousand tonnes of crude iron were missing in 1958, and these figures were forecast to reach 1.5 million tonnes and 349 thousand tonnes, respectively, by 1960 [11].

In this situation the CMEA urged each member country to help eliminate the scarcity. As the Planning Office reported, "On the basis of the recommendations we accepted the completion of Stage I of the Danube Iron Works before 1960. Furthermore, the construction of Block 2 of the coal coking works in 1958 and the construction of Blocks 3 and 4 was recommended for 1960–62 which was accepted by official Hungarian organs only on condition that an adequate quantity of cokeable coal would be provided" [12].

Thus, the purchase of an adequate quantity of metallurgical products could not be secured within the framework of international cooperation and this seemed unrealistic even in a longer run.

Another factor of the economic policy dilemma followed from the attained degree of completion of the already launched and discontinued metallurgical investment projects in Hungary. This is best illustrated by the situation of the Danube Iron Works. According to the original construction plans of the metallurgical base the Iron Works was to be completed in two steps. "At present, the construction is in its first step . . ." reported the minister of metallurgy and engineering industry on the state of the project in January, 1957. The coking work was finished to 80 per cent, out of the crude iron producing capacities one of the two planned blast furnaces was finished, while the other remained at 80 per cent completion. The ore crushing and preparing mill was 90 per cent finished, however, the slag granulator was missing. From the steel mill capacities, three of the four planned open-hearth furnaces were ready, the fourth, however, was less than half completed. The completion of the auxiliary machinery was, in turn, only 70 per cent. The hot-rolling mill was 80 per cent finished, while the cold-rolling mill was completely missing. As the ministerial report summed it up, "the first construction phase has not been completed; at present the plant only produces metallurgical semi-finished products so far, and the production of rolled products is yet to be started". The construction of the Danube Iron Works absorbed 3300 million Forints' investment by early 1957 and for the construction of the so-called extended first phase 68 per cent of the investment funds was used up. According to calculations, full completion required a further 1600 million Forints' investment, or nearly one third of the total investment planned. This would however, have brought up the output value of the plant from 34 to 66 per cent of the total planned output and the plant would have been no longer in the red. As was put by the above quoted report in January, 1957, "in other words, by investing the last third of the investment amount the value of output would roughly treble. By constructing the rolling mills, such steel plates would be produced as are scarce even on a worldwide scale, and can be sold advantageously either on the domestic or on the external markets and the world market price of which shows a constantly increasing tendency." [13]

After the investment of huge sums the stoppage of the construction of the Iron works, the drawing away of the relatively small amount of investment capital seemed obviously unreasonable and this standpoint was reinforced by the internal and external demand for metallurgical and especially rolled steel products, and by the existing and presumably growing scarcity within the CMEA.

Although the former ideas and endeavours at self-reliance were repudiated, the above reasoning made it absolutely necessary that, even if at a more modest pace, the development of the iron and steel industry should be carried on already during the years of the second three-year plan. The report of the Planning Office, prepared in the Summer of 1960, could, thus, give account of numerous investment projects in metallurgy. For instance, the coking Block No. 2 of the Danube Iron Works was finished ("the setting up of which saves imports of coke"). The report went on: "By stepping up investment, the

hot-rolling mill will be set up one year earlier, already in 1960 together with the open-hearth furnace No. 4. The construction of the cold-rolling mill was initiated as well, the start of which is expected at the end of 1963. The reconstruction and modernization of the open-hearth furnace at Ózd has also begun, to be finished in 1963 as well." The gas pipeline between Tiszapalkonya and Diósgyőr was to make possible the modernization of the heating of the open-hearth furnaces of the Lenin Metallurgical Works. The Ózd Metallurgical Works were building an oxigen factory, and the cold band rolling mill at Borsodnádasd and the slag foamer at the Danube Iron Works were also under construction. As it was summarized in the report of the president of the Planning Office on the 3-year plan, "metallurgy overfulfils its investment plan by 817 million Forints" [14].

However, these were not the last links in the chain of the formerly initiated and discontinued metallurgical program. A report prepared for the Political Committee in the mid-1960s referred to the almost ten-year long metallurgical development program after 1956 as follows: "The majority of investment resources necessarily had to be allocated for the already initiated construction projects (hot rolling mill of the Danube Iron Works, the steel mill of the Ózd Metallurgical Works, the block and blooming-mill of the Lenin Metallurgical Works), and concentrated on items contributing to the quantitative increase of production. In order to expand the range and assortment of products, production capacities for cold rolled bands, welded tubes, high-strength wires and curved sheet products were created." The second five-year (1961–1965) plan envisaged a 45 per cent development of the metallurgy involving the investment of 7.5 thousand million Forints.

However, as the above retrospective evaluation stated, in the end 80 per cent of hot-rolled products consisted of less valuable, heavy, large-dimension steel rods and sections, thick and medium plates, produced and exported in surplus, while the more valuable thin sheets, acid-proof sheets, bands, small-diameter rods and sections, wires had to be imported. (In 1964 Hungary exported 711 thousand tonnes of metallurgical products in all; in the same year 552 thousand tonnes of such products were imported – however, the average price of one tonne of exported products was 1554 foreign exchange forints against the average price of 1813 f.e. forints in case of imported goods. The export capacities in metallurgy undoubtedly played a foreign-exchange-earning role, but at a price of having to product and sell 100 Forints' worth of metallurgical product to earn one dollar's worth of convertible currency.)

Thus, a continued development of the iron and steel industry seemed inevitable in the mid-1960s at the time of the preparation of the third five-year plan as well: "The burden of the incorrectly defined development objectives still bears on us today, for this reason and also because of the incomplete, inconsistent realization of later decisions (second five-year plan) the structure of metallurgical production, i.e. the up-to-dateness, quality and range of choice of products is not adequate to the needs and demands of the national economy" – so wrote a report prepared for the Political Committee concerning

the development prospects of siderurgy.* Following from the above, the main objective of the development policy was formulated in such terms as the restructuring of metallurgical production in the direction of finer products the imports of which should be reduced to 15–20 per cent of the 1964 level by the end of the plan period [15].

The surviving effects of earlier development endeavours, the scarcities and the limited scope of international cooperation, thus, kept the further development of the iron and steel industry on the agenda throughout the 1960s, with the aims not restricted to the completion of the already started projects; one of the main criteria of decisions was elimination and substitution for imports.

Economic policy, thus, could not merely follow the path determined by the lessons learned and decisions taken in late 1956, but had to adjust to the constraints. In this way, however, through the measures taken, it produced new determinations and contradictions.

As after 1956 the creation of harmony between manufacturing and the production of energy and raw materials came into the fore in economic policy, consequently the available resources were largely tied up by the investment-intensive branches. A significant proportion of industrial investment funds were absorbed alone by the efforts to increase energy production, as is conformed by the report on the near completion of the investment targets of the three-year plan, prepared by the Planning Office: "Within the development of industry, a significant part of investment sums are allocated for the development of the production of primary energy and electricity itself. The share of these branches amounts to 40 per cent of the resources allocated for the development of industry." [14]. The president of the Planning Office announced in the months following the initiation of the second three-year plan that about 45 per cent of the investment funds would be allocated to industrial development, however, within this sum, "the fact must be reckoned with that the lion's share of investment, about 70–75 per cent, has to be spent on basic raw material and electric energy production" [16].

Preference for the chemical industry

The above shown endeavours were, however, not at all limited to the continuation of the development programs well known from the 1950s. The intention to create harmony between manufacturing and the supply of raw materials gave rise, in the spirit of import substitution, to new development programs as well.

One of the main new features of the industrialization policy was the ambitious plan for developing the chemical industry. As the paper submitted by the minister of heavy

*The report added: "The situation is rendered the more difficult by the fact that national economic plans determine production in quantitative terms and structural changes are not elaborated in compulsory figures (figures refer to 'tonnage'). The present price system does not foster the production of labour-intensive commodities."

industry put it, "the importance of the development of the chemical industry of Hungary principally lies in the perspective that it will expand the raw material basis of industry, improve the supply of the population with consumer goods, and make a significant contribution to raising agricultural yields. At the same time, it will have an advantageous effect on the balance of foreign trade through elimination of the deficit in such materials." [17]. The chemical industrial program was thus an indispensable tool of the new agricultural policy on the one hand, and, on the other, it opened up a new path for the substitution for imported materials by widening the domestic raw material basis.

Although this was invariably an example of the import-substitution-oriented policy of raw material production, it still seemed to be incomparably more advantageous than the development of metallurgy and the metal processing industry. According to contemporary computations, the capital cost of investment into the production capacity of one cubic metre of plastic compared to that of steel and aluminium was 1:3:5, respectively. The same branches showed a proportion of 1:5:8 from the aspect of energy-intensity.

However, the concept of the large-scale development of the chemical industry, similarly to that of energy and raw materials, cannot be explained exclusively in terms of the interrelations of Hungarian industrial policy. The less so, as at first the reorientation of the development policy awarded a relatively more modest role to the chemical industry, and the development of the branch was to be based upon domestic raw materials, especially on the large quantity of lignite available and on the domestic hydrocarbons. This was especially underlined by the "preliminary concept" on the development of the chemical industry, prepared in the Spring of 1958: "In the development of the chemical industry the highest possible exploitation of the domestic raw material base is planned. In this respect the inacceptability of the misconcept, according to which the Hungarian chemical industry is lacking a domestic raw material base, has to be pointed out . . . our natural gas production is not insignificant from the aspect of the chemical industry, and oil and lignite are both very significant raw material resources." This concept also emphasized gas production from lignite, the development of the gas industry as "one of the most efficient ways to close the energy gap" [18]. In the Spring of 1958, even for the period following the three-year plan period, up to the mid-1960s, only very modest targets were set in the proposal by the president of the Planning Office for the development of the chemical industry: "The production of the chemical industry will increase by 38–40 per cent by 1965, the available resources will be concentrated on the development of fertilizer production, on gas production from the lignite of the Gyöngyös region, on pharmaceutical production and on oil refining, with certain organic chemicals (plastic) production taken into account to a lesser extent in setting the development targets." [16]

However, the general development program for the chemical industry soon departed from this concept, getting increasingly into the focus of industrialization. Two years later, the following reference was made on the discussions on the former development orientation: "It was accepted for a long time that domestic lignite provided an

adequate base for the development of the chemical industry as abundant reserves of this material were available. According to calculations and the results of specialists' discussions, a decision was taken according to which hydrocarbons, natural gas and oil come into consideration as fundamental raw material bases. For this reason, the second five-year plan will see the start of the application of petrochemical processes in a great number of industrial branches." As it was pointed out at that time already, "the utilization of coal in chemistry will play a negligible role the development of the (Hungarian) chemical industry . . ." Of course, it must not be left out of consideration, that such decisions were decisively influenced by the availability of cheap hydrocarbon imports from CMEA countries; it then seemed as if they could be increased almost to an unlimited extent. For instance, the production of ammonia necessary for the production of nitrogenous fertilizers would have cost, under the contemporary price conditions, almost 5000 Forints per tonne, while the cost was only 3000 Forints in case natural gas were used. As against this, it was stated beyond doubt that "the necessary raw materials are available, and they seem to continue to be available, for the development of the chemical industry during the second five-year plan" [19].

The large-scale devlopment plans of the chemical industry were conceived, as it is shown by the foundation of the raw material basis on shipments from CMEA countries, instead of on Hungarian resources, as a part of intra-CMEA cooperation. The interrelations were, however, not limited to the advantages of the possibility of buying raw materials cheaply.

The motives themselves were closely related to the suddenly booming and increasingly significant activities of the CMEA. This rooted in the Soviet economic policy plan aimed, from the second half of the 1950s on, at catching up with and overtaking the most developed countries within a short time. In this context great importance was devoted to the hitherto neglected plastics industry and to the development of the chemical industry on a wide front. As the minister of heavy industry informed the Economic Committee at the end of 1958, "During the last two years development of the chemical industry has got a special emphasis in the Soviet Union. After the decree of the Central Committee of the Communist Party of the Soviet Union concerning the development of the chemical industry, decisions were made on accelerating the development of the chemical industry in the German Democratic Republic, in Czechoslovakia and in the Romanian People's Republic as well" [20].

In correlation with all this, the harmonized, large-scale development of the chemical industry came increasingly into the fore in the booming activity of the CMEA as well. The Standing Commission for Chemical Industry of the CMEA, founded in October, 1956 and hardly displaying any activity in the first period, started to initiate general development programs from the end of 1957 on. As the head of the Hungarian section of the Commission reported, "The third session of the Standing Commission, held in December, 1957, saw a significant turn in the work toward economic cooperation. The Standing Commission passed resolutions on the elaboration and coordination of the long-term development concepts of the most important branches (plastics, fibres, in-

organic fertilizers, synthetic rubber, inorganic raw materials) of the chemical industry." [20]

Already in the summer of 1958, on the fourth session held in Berlin, the protocol gives account of the acceptance of the ". . . report prepared by the working group for long-term planning concerning the technological orientation and preliminary concept of the development by 1975 of the most important chemical industrial branches in the participating countries". The exposition of this concept points out that in the CMEA member countries the chemical industry is ". . . at present considerably underdeveloped. In this context the countries of the socialist camp become, in certain cases, dependent on certain capitalist countries as regards the imports of chemical products . . . The CMEA countries have immense resources of raw materials at their disposal . . . These make it possible that *all branches* of the chemical industry be developed at a high rate and to a great extent." [21]

The importance attributed to the chemical industry is best represented by the fact that, besides energy supply, this industry was covered by the long-term, fifteen-year plans for the period up to 1975 prepared by the individual CMEA countries; these plans not only allowed the collation of development programs but also made possible to harmonize the structure of production. The especially ambitious development program set the target of increasing nitrogenous fertilizer production to 5.3-fold, the production of plastics more than fourfold, synthetic fibre production 5.3-fold, and the production of synthetic rubber tenfold – these targets aimed at overtaking the contemporary plastics production of the USA by one and a half.

This period, the summer of 1958 saw the revision of the development plans for the Hungarian chemical industry. The development concepts, prepared merely a few months earlier on the basis of domestic raw materials in connection with the compilation of the targets of the second three-year plan, which envisaged a modest development by the mid-1960s became untenable. As the minister of heavy industry underlined at the end of 1958, the above referred plans for the development of the Hungarian chemical industry "have already been found to be limited in many respects at the fifth session of the Standing Commission on Chemical Industry of the CMEA and strikingly fall short of the average growth rate in the camp" [20]. The chairman of the Hungarian section of the Standing Commission called attention to the fact already in the autumn of 1958 that the Soviet, German and Romanian chemical industry enjoyed an absolute preference and ". . . the revision of the Hungarian standpoint seems appropriate . . ." [20].

There was a divergence in opinions about the direction of chemical industrial development also in other member countries of the CMEA. The some months' old Hungarian development plans were not alone in envisaging a more modest growth, based on the domestic raw materials of chemical production. The above quoted report said: "Initially there were voices . . . that the chemical industry should only be developed where all raw materials are available in abundant quantities. This view was challenged especially by the Soviet and Hungarian experts, and finally the principle was accepted by the Standing Commission that each participating country should develop the production

of large-volume chemicals (plastics, synthetic fibres, fertilizers etc.), which are required by general industrial progress; this must be assisted by the other countries through shipments of energy and raw materials. The main development directions of the chemical industry were fully clarified by the recommendations for long-term plans . . . It was endorsed that the main raw material base for the development of the Hungarian chemical industry is oil and natural gas, which makes possible the large-scale production of up-to-date plastics and of nitrogenous fertilizers. In addition, the pharmaceutical industry needs development . . ." [22].

Thus, these months saw the victory of the concept of a particularly rapid and wide development of the chemical industry, which meant focussing on the oilbased heavy chemical industry. In the autumn of 1958 the agenda of the Economic Commission (of the government) contained such a development concept which already envisaged for the period 1958–1965 a 3.5-fold increase of fertilizer production, that of plastics production nearly four fold and that of synthetic fibre production more than four and a half fold. The arguments went as follows: "In conceiving the development concepts we took into consideration the recommendations made by the (CMEA) Standing Commission for the Chemical Industry. In spite of this, the Hungarian proposals bear out invariably the smallest per capita quantities . . ." The chairman of the Standing Governmental Commission on Chemical industry emphasized: "The Hungarian chemical industrial development is still inadequate in respect of plastics and synthetic fibres . . . A more significant development could only be accomplished, according to the specialists of the chemical industry, if our government took a step similar to the brother countries by giving a special emphasis to the development of the chemical industry." [23]

The Political Committee of the HSWP dealt with the plans for the development of the chemical industry in April, 1959 and the guidelines declared for the Seventh Party Congress already regarded this development as a key issue. By the first half of the 1960s, the second five-year plan already put the chemical industry into the focus, concentrating 12 per cent of industrial investment on this branch. The objectives were ambitious: "As a result of the development of the chemical industry, the demand for essential chemical products will be satisfied entirely from domestic production within 5-6 years." [24]

In the realization of one of the most significant investment projects of the era intra-CMEA cooperation offered but meagre opportunities for international division of labour. In devising projects, it was deemed more appropriate to process raw materials in a complex way and a wide product spectrum seemed economic. Otherwise, this was in harmony with the decisions of the tenth session of the CMEA held in Prague. Namely, on the development of the chemical industry between 1961–1975 this session ". . . passed a resolution, according to which each country should set the target of developing the production of fertilizers and of their raw materials, of synthetic fibres and of synthetic rubber at the highest possible level". In fact, imports from the socialist countries could not be relied on, as it was pointed out on the session of the (party's) State Economic Commission, as these countries "are making the first steps toward the large-scale development of their chemical industries and are not capable of exporting any of the principal

products". The conclusion was drawn this meant for Hungary that she had the obligation during the second five-year plan "to try to satisfy the demand for chemical products from domestic production to the greatest possible extent, in order to avoid the aggravation of scarcity within the camp and a deterioration in the balance of payments as well . . ." [25]. 1959 also saw a decision to include the production of chemical machinery in the central development targets of the machine-building industry. In the summer of 1960, the settled, long-term program of the priority development of the chemical industry and the agreed directions of its development were commented upon as *fait accompli:* "The development of the chemical industry is one of the key issues of the second five-year plan and the most salient feature of the technological development in this field is the considerable shift to the natural gas and oil bases." [26]

According to these decisions, the production of chemical raw materials was boosted in Hungary through huge new investment projects or by the expansion of existing factories. The production of fertilizers got a new impetus from the completion of the Tisza-side Chemical Combine, from the doubling of the production capacity of the Borsod Chemical Combine; the new polyvinyl-chloride plant of the Berente Chemical Works, the polyethilene plant of the Tisza-side Chemical Combine, the caprolactame factory in Sajóbábony and the perlon fibre and continuous polyamid filament plant of the Hungarian Viscose Factory. All these founded the rapid development of plastics and synthetic fibre production in the first half of the 1960s.

The program for the development of the chemical industry was the first-born child of the industrialization policy of the 1960s; it was launched with the primary economic political aim to contribute to the formation of an industrial structure better suiting the the endowments of Hungary and that in a cheaper and more advantageous way than the metallurgical program, it would extend the raw material basis of the manufacturing industry. In pursuing this aim, seeming to be secure both from the side of import resources and from the side of international price conditions at the time of its conception, it opposed another central aim of the economic policy, namely, the pursuit of large-scale production of goods which are the least raw-material-intensive and which require a great deal of skilled labour. While the chemical industry aimed at the widening of the raw material basis, it required 2.5 times more energy for one unit of output than the average for the whole industry, burdening the energy balance of the country and increasing the dependence on imports in case of one of the tightest bottlenecks. The paradoxical effect, known from the metallurgical program of the 1950s, was repeated: while the basic chemical industry substituted for considerable imports of important materials by its development, the import-substituting development, because of missing natural endowments, backfired by boosting the demand for imported energy and raw materials.

Transformation of the production structure and the engineering industry

The priority development of the energy basis and of the production of raw materials, within this, of the chemical industry and the observation of intra-industrial proportionalities are already in a multifarious relationship with the starting restructuring of industrial production.

The priority of certain branches resulted in itself in a structural change. The preference for these industries had, in turn, a significant influence on the structural changes in the other manufacturing branches as it engaged a considerable part of the resources. These relations were manifold and contradictory. If the central planners wished to pay special attention to the endowments of the country and to the elimination of previous autarkic tendencies, it encountered a very complicated contradiction even in its starting endeavours. On the one hand, the internal harmony among the branches, the consolidated development of manufacturing needed safe supply with energy and raw materials, which, in turn, was hardly possible without the development of relevant industries in the country because of the similar scarcity existing with the main trading partners in most of such materials. While a large part of investment – as we have pointed out, about three quarters of all industrial investment* at the end of the 1950s – was allocated for the creation of adequate capacities in order to secure supply with energy and raw materials. Thus, even if in a changed form, the tendencies of autarky and the large-scale imports of raw materials and fuels were unavoidably asserted (though the latter had a different structure).

This, in turn, made the *structural transformation of processing industry* more difficult eight from the start.

A development policy adequate to the endowments came into the fore, of course, also in the case of the manufacturing industry. With respect to the transformation of the structure of manufacturing and its development the economic political approach of the late 1950s was mostly determined by two factors: the stress on the endowments of the country on the one hand, and the concrete opportunities to take part in the international division of labour more intensively. As to the first factor, the concept of endowments was interpreted so that such branches and manufacturing activities were regarded to be advantageous where domestic raw materials and/or domestic industrial experience or tradition, i.e. skilled labour was available. It was especially stressed that the branches and products have to be selected so that they require the least of materials and possibly the most of qualified labour. This was formulated in the following way by József *Bognár* in his speech in Parliament in 1957: "... Especially the development of those

*In addition to the already quoted sources, let us refer to a proposal of the National Planning Office made in the summer of 1957 concerning investment of the three-year plan: "We suggest the allocation of the greatest part, more than 75 per cent, of industrial investment to the development of the production of raw materials (mining, electricity, metallurgy, chemical industry, construction materials" [27].

industrial branches should be supported that possess traditions in our country, have a good skilled worker staff and excellent technological experts and which attained in the past the international standards – such as the highvoltage machinery industry, telecommunication equipment, vacuum technology and precision-engineering. In this way, progress could be made in several fields simultaneously. On the one hand, less investment would be necessary, on the other, the capacities created through investment could be put to production in a shorter time, thirdly, these branches are less raw material-intensive, fourthly, these branches could rapidly achieve profitable exports . . ." [28].

The central critical question in this respect was determination of the place and the internal branch and product structure of the engineering industry. The concepts of industrial policy, first emerging from the turn of 1956/57 were, also in this case, first elaborated during the preparation of the second three-year plan, which provided the framework for their realization. A significant further development of the engineering industry was beyond question by this time: "The manufacturing heavy industry, especially the metal processing heavy industry (engineering industry) has to be developed very rapidly out of economic necessity" – as the concept of the Planning Office stressed. "This is required, in the first place, in order to provide for export earnings to cover the imports of raw materials. The fact that in certain branches of the engineering industry the highly qualified labour combined with inexpensive raw materials can provide profitable employment for Hungary fully justifies this guideline."

Within engineering itself, however, definite changes were planned. "Through the investment of the three-year plan the already initiated restructuring of the engineering industry will be carried on. To achieve this aim, investment will be concentrated on fields where the production of goods can be realized with the least possible use of materials. In the first place, the industries having traditions in this country will be developed . . . On the basis of the above, during the three-year plan period primarily the production of Diesel engines and Diesel-powered railway vehicles, the telecommunications industry, the production of high-voltage electrical machinery, the precision-engineering industry and the production of roller bearings are planned to be developed." [29] The production capacity of high-voltage machinery was planned to increase by 35 per cent, that of the precision-engineering industry by 40 per cent, respectively, during the three years. In the Spring of 1958 the Ministry of Metallurgy and Engineering reported that "the realization of the whole Diesel program has begun" [30]. In that year the cornerstones of the engineering industry were already pointed out clearly: "The investment projects of the Ministry of Metallurgy and Engineering industry financed from supplementary budgetary allocations are characterized by the concentration of about 79 per cent of the total sum on the acceleration of the investment projects in the branches primarily designated for development. The largest sum is involved in the case of accelerating investment into the Diesel project (56 per cent). 16.2 per cent is allocated to the acceleration of investment in the telecommunication equipment industry, 6.2 per cent for the acceleration of investment in high-voltage electrical machinery production." [31]

Within the framework of the second three-year plan the putting of the metallurgical and related programs of the 1950s into low gear and the priority development of the less material intensive, traditional industries were expected to result in a structural change in engineering as well: the preliminary draft of the three-year plan of the Planning Office pointed out in the Spring of 1958 that "these development directions lead, of course, to shifts in proportions in the engineering industry already during the three-year plan: the proportion of the production of heavy machinery within the total engineering production decreases, from 61 per cent in 1955 to 54 per cent by 1960 and, in addition, the structure of products will be improved as well" [32]. The three-year plan, however, could not set the target of achieving a radical change, at least not at the beginning, in 1958, as a significant part of the relatively modest investment resources was tied up by the program for energy and raw material production. As the above referred document of the Planning Office underlined, "The industrial development of the three-year plan has an impact on the structure of industry. The structural change, however, cannot be a rapid process, with respect to economic and natural factors . . . structural change in industry does not mean, thus, that the development tendencies will be basically different during the three-year plan, or that a tendency preparing such a change emerges, but that the development of certain branches which proved to be uneconomical will be slowed down and that of other branches will be sped up."

Even the realization of the relatively modest targets was not an easy business. For instance, in spring 1960 the following information was given to the State Economic Commission: "The progress made in the improvement of technological standards, in the structural change in industry has been insufficient . . . It is a disadvantageous feature from the aspect of both technological development and the restructuring of industry that the lag in the development of certain priority industries increased." The share of precision-engineering in the production of the engineering industry, for example, showed a straight decrease, and the Diesel-program was seriously behind schedule [33].

In the same period considerable efforts were made at the renewal of the manufacturing and product structure. A report of the Ministry of Metallurgy and Engineering underlined at the beginning of 1960 that "more than 52 per cent of the 1959 output the telecommunication-equipment industry consisted of models not more than 2-year old". Besides the launching of microwawe equipment, it especially stresses that "the industrial electroacoustical production was developed on an international level, which is characterized by the large export shipments of stadium equipments". The milestones of change were represented by the international novelty of the mill machinery building (centrifugal milling), by the first NC milling machine and the grand prizes won by a number of engineering products on the Brussels world exhibition [34].

Changes were triggered by the new products also in the structure of the machine and precision-engineering exports. Between 1958 and 1961, for example, the participation of ships and harbour equipment and of railway rolling stock decreased in machine exports from 23 to 19 per cent, while the export of complex installations, telecommunication equipment and precision-engineering products increased its share from 31 to

38 per cent. "The composition of the exports of machinery and precision-engineering products developed in a direction corresponding to the concept of industrial development, i.e. the share of telecommunication equipment and of precision-engineering products increased." [35]

In the course of the preparation of the second five-year plan, a similar concept was formulated for the engineering industry summarized by the report made for the Political Committee in the spring of 1960: "The development plan of the engineering industry is, in fact, a continuation of the structural transformation begun during the three-year plan. This is also reflected by the fact that the priority branches (vehicles, high-voltage and telecommunication equipment and the precision-engineering industries) get 54 per cent of the investment sums allocated for the development of the engineering industry." [36]

At the beginning of the 1960s, the development of the precision-engineering industry was given special attention. This was expressed in both the twenty-year plan (1961–1980) under preparation and the second five-year plan for the period 1961–65 as well: "The more significant investment projects will be made in the high-voltage electrical machinery industry, in the telecommunication equipment industry in precision-engineering and in the manufacturing of machine tools" – said the summary of the proposal of the National Planning Office for the second five-year plan. "New factories will be built only in the precision-engineering industry, the development of which by leaps will begin already during this plan period, according to the concept of the 20-year plan." [27]

But the development concpets for the longer run had not settled down by this time. Even the above quoted proposal of the National Planning Office speaks about the ". . . as yet not fully detailed" development concepts of "the structure of the branches and products of the engineering industry". The uncertainty was a result of several factors. This is well exemplified by the case of the Diesel-project that was deemed promising. Instead of the highly material intensive and less profitable engineering branches, almost as a symbol of the reorientation of the engineering industry, the Diesel engine and train production, which was up-to-date and had excellent export markets, as well as great traditions, had been in the phase of planning and preparation ever since the mid-1950s; after 1956 huge contracts were made for export shipments and the mass production of a complete range of such products was under realization. In the summer of 1959 this project was regarded as a natural inheritance. "There are development projects (e.g. the Diesel-project) which had started before the second five-year plan and are, thus, given . . ." [38]. Two years later, however, it became obvious that the Diesel-project, under preparation and realization already for 5–6 years must be given up. As the targets of the second five-year plan were commented upon by the National Planning Office, "The present plan, thus, concentrates the resources on the priority engineering branches designated by the Seventh Congress of the Party, with the exception of the production of Diesel railway engines . . . the export of Diesel railway engines is suggested for restriction even under the figures of the long-term contract because of its unprofitability, the uncertainty of long-term sales opportunities, the high content of materials and parts

imported from the West and because of the large sums that have to be additionally invested in the project." [37]

This paper is hardly the place to analyze the causes of the failure of the Hungarian Diesel-project, the drawn out, lagging preparations, the effects of the changes on the world market, and of other factors. The following was written about the subject summarily in the spring of 1965: ". . . the realization of the Diesel project has been under way for a long time in the engineering industry, involving significant investment. Since the endorsement of the project the realization showed such a slow progress that the basic conditions of its initiation underwent significant changes: the production and export of large Diesel engines for main-line traction cannot be brought about and domestic demand has to be satisfied from imports. The situation is similar in the machine tool industry which had been designated for priority development . . ." [39]. If we regarded this project as the symbol of industrial development adjusting to endowments in the second half of the fifties, then its failure may be the symbol of the difficulties, frustrations and uncertainties of restructuring industry.

Options of the international division of labour

The observance of traditions, endowments, the priority to production fields involving relatively less material consumption and high demand for skilled labour was, of course, easy to recognize and declare on the level of general principles. However, giving up autarky in manufacturing, and launching really advantageous and profitable branches and production fields capable of mass production turned out to be a more difficult task. These plans could only be realized through intensive participation in the international division of labour, through a high degree of industrial cooperation. Even the comprehensive elaboration of the development policy was unthinkable without clarifying the possibilities of international cooperation. Thus, it is no wonder that the Hungarian planners, aiming at the formulation of a new economic policy, were a keen advocate of a new type of cooperation among the CMEA countries, resulting in joint production. Their expectations and plans were to no small extent based upon the renaissance of the CMEA from 1956 on.

The history of the CMEA is beyond the scope of this paper. As much must be mentioned in this context, however, that the economic relations, formerly based upon trade agreements and strictly bilateral contracts began to change at the same time when the reorientation of Hungarian economic policy became topical. From the spring of 1954 on (after the fourth session of the CMEA) and in 1955 the search for new ways of cooperation strarted, and the approach changed. May, 1956 was undoubtedly a turning point – the seventh, Berlin session of the CMEA opened a new era: member countries sought a common solution to the raw material and fuel problem through a multilateral system of agreements between countries, by means of the construction of a common electricity and international power transmission network, through joint financing of

common enterprises. Simultaneously, there was a clear tendency toward specialization of production, harmonization of development and even toward the joint preparation of long-term development plans.

Parallelly with the fundamental change in approach the achievement of new goals was supported by the renewal of the institutions and operating system of the CMEA.

It seemed obvious that elimination of earlier autarkic tendencies and the large-series, profitable production in harmony with endowments was the best attainable on this very basis. Consequently, the Hungarian government keenly embraced the new plans and ambitions of the CMEA.

This is excellently reflected by the Hungarian standpoint declared in the debate broken out on the nature of the activities of the CMEA and its working style in April 1957.

The Hungarian government, while stressing the importance of the very topical criticism, pointed out that the "... proposal, which, on the basis of the so far experienced mistakes in the work of the CMEA, aims at loosening the framework of cooperation, suggesting, in fact, the limitation of the activities of the CMEA, is *unacceptable,* as ... it would help the assertion of tendencies contrary to the interests of the Hungarian economy". As it was formulated in a letter sent to the representative of the CMEA, the Hungarian government even found the progress made in the framework of the CMEA to have been too slow. It missed the 10–15 year long-term plans which could help elaborate the mutual interests of independent countries, it found that conditions for the creation of a common investment bank and of a common export-import bank had been attained and that the introduction of a multilateral clearing system was timely [40]. The plans for cooperation were, of course, related to the international endeavours and processes of economic integration, and to the strivings that were in the focus in the Soviet Union for catching up with, and overtaking, the developed capitalist countries in a historically short time. These plans were markedly Utopian and wishful, and contemporary Hungarian planning could not break this spell, either.

In spite of this, these very unrealistic plans gave motivation and impetus to the development of a new type of economic relations. In order to realize cooperation and harmonized development and investment (and, according to the intentions of N. *Khrushchev,* planning on CMEA level), the seventh, 1957 session of the CMEA in Warsaw called for the compilation and harmonization of long-term plans covering the whole of the national ecomonies, and the twelfth, Sofia session of the organization repeatedly urged the realization of these aims. As a result, the preparation of long-term plans started also in Hungary. As we have already mentioned, such plans were prepared covering electricity needs, the development of the chemical industry, and the prospects of technological progress in certain industrial branches. A general long-term plan was, however, missing. In the wake of new initiatives a resolution was made by the Economic Commission on the fifteen-year plan. "... The fifteen-year plan of the development of the national economy must be worked out. Its final deadline will determined after the disputes under way in the CMEA. This fiteen-year plan has to be anyway completed before the preparation of the third five-year plan begins, i.e. by 1963 the latest." [41]

Although in the end the fifteen-year plan remained incomplete, the formation of long-term plans had an undoubtedly fostering effect on the formulation of economic political concepts. An example of this was the new development concept of the aluminium industry. The exploitation of the bauxite wealth of Hungary was an important issue in economic policy. Between the two world wars most of the bauxite produced was exported as crude ore. This was not changed significantly by the growing alumina production and the creation of a small capacity of aluminium furnaces during the war years. In spite of large investment, the forced industrialization policy of the 1950s left the path of development unresolved. The main obstacle, of course, was the extremely high energy requirement of the aluminium industry as well as its high capital intensity. The *Leitmotiv* of industrial development based on Hungary's endowments, on her domestic raw material resources gave birth to such proposals by experts which, in spite of the above factors, advocated the building up domestic aluminium production and processing. Thus argued the authors of an article in *Közgazdasági Szemle* (Economic Journal) in the autumn of 1957: "In exchange for aluminium practically every primary energy can always be purchased on the world market . . . in the provision of foreign exchange covering the purchase of our energy supply an export involving, in fact, the exportation of energy, can also be regarded as viable . . . it is much more profitable to process bauxite into aluminium or aluminium products than exporting it without processing. Namely, while the net foreign exchange receipt for the sale of bauxite corresponding to one tonne of aluminium (6.54 tonnes) buys oil equivalent to only about the heating value of 9 tonnes of domestic coal, one tonne of the export of aluminium foil buys as much oil as the heating equivalent of 289.4 tonnes of domestic coal." [42]

The cooperation developing within the framework of the CMEA also promised other opportunities. The Hungarian Secretariat of Economic Relations prepared an action program as early as in the Summer of 1958 for the realization of the resolutions of the ninth session of the CMEA and, on the basis of this program, the Standing Government Committee for Non-ferrous Metallurgy was instructed to formulate concepts "for the possibilities of increasing the production of bauxite, alumina, and aluminium for a 15-year period, with special attention to the years 1961–65 taking in consideration the opportunities and necessities to result from economic cooperation" [44]. In the end, the new framework of the cooperation gave birth to the alumina and aluminium agreements, concluded between Hungary and Poland in 1960 and between Hungary and the Soviet Union in November, 1962 which based the processing of Hungarian bauxite on the production of alumina in Hungary and on the building of the necessary electricity-intensive aluminium metallurgy capacities in the Soviet Union. These agreements allowed, through mutual advantages, the development of aluminium processing also in Hungary.

The second half of the 1950s also saw the start of production specialization among Eastern European countries in engineering as well. After the first recommendations in the spring of 1956, by the beginning of the 1960s specialization agreements were concluded in engineering for more than a thousand products. Hungary undertook the production of 228 types of machines, out of these, 48 were to be produced exclusively by this

country [44]. The Soviet delegation submitted a specialization proposal to the Standing Commission for Engineering of the CMEA in January, 1960, according to which Hungary would stop producing lorries with a load capacity of 3–5 tonnes and special vehicles with 5–7.5 tonnes, while the production of buses with a seating capacity of 30–40 and over for the supply of all CMEA countries with the exception of the Soviet Union would be awarded to Hungary. (The production of the city transport version of this category of buses would, according to this proposal, have gone to Czechoslovakia.) In contrast to this proposal, the Hungarian government claimed exclusive rights to produce this type of buses for the supply of all CMEA member countries including, thus, the Soviet Union as well. With this taken into account, the production of a series of 8 thousand was projected for 1965, and of 12 thousand for 1975 [45].

In the end, on the basis of the intra-CMEA specialization, and, in fact, from the loans of the newly founded Investment Bank of the CMEA Hungary developed her large-scale bus production, elevating her into the position of one of the most significant bus producers of the world and leading to one of the most spectacular successes of export-oriented industrial development.

Thus, when compared to former trade relations, a multifarious and vivid economic cooperation was developing, opening a horizon for the really radical restructuring of industrial production.

As it became clear shortly, however, progress was considerably slower and more contradictory than initially hoped.

Firstly, the specialization agreements only affected a fraction of production and exports. "The value of specialized product represented about 3 per cent of the 1963 output of the engineering industry and 10 per cent of exports to brother countries." Similarly, "Specialized products represented about 4.5 per cent of the total 1963 output of the chemical industry and 10 per cent of exports to brother countries." If we take into consideration another statement of this report, saying: "production specialization agreements have come into force only in the fields of the engineering and chemical industries", then the conclusion seems to be well-founded in the light of figures: "The present situation of production specialization, the ventures in this field do not make a significant contribution to the specialization of our industry, within it, that of our engineering and chemical industries . . . The mutual shipments effected with brother countries and the size of such shipments are based upon the exchange of products having become traditional on the basis of mainly bilateral trade agreements." [46]

The limited scope of specialization was also determined by the lagging or missing implementation of central decisions. For instance, by 1963 out of the 228 engineering products designated for specialization the production of 203 should already have begun, still, for about a third of them even the design was yet to be prepared. On the other hand, according to the same report, prepared in 1964, ". . . the demands declared by the brother countries for the specialized products were unfounded . . . In case of nearly 40 per cent of specialized engineering products even the trade contract remained unconcluded, thus, no shipment was effected, either . . . The lack of orders was also a result of

the fact that the brother countries – out of various considerations – do not regard specialization agreements as binding on them . . . to a considerable extent, the recommendations were elaborated for products for which there was no demand from the side of the brother countries. Consequently, a part of the specializations is . . . but formal. For tactical considerations, certain brother countries . . . declare their intention to produce items covered by the recommendations being prepared. For this reason, a significant proportion of specialized products is manufactured by almost all countries. The development of production creates parallel capacities exceeding needs."*

The lack of stimulating effect, the slow and modest progress of a real division of labour were soon followed by the various disturbances of cooperation. Hungary, for instance, accepting the recommendations of the CMEA for specialization, cut back certain areas of agricultural machinery production in the first half of the 1960s (the production of grain harvesting combines, for instance, was completely wound up and the development of the tractor industry was stopped).

As a result, in the first half of the 1960s the production of agricultural machinery, at first planned to develop by one and a half, was cut down through the correction of the five-year plan figures in annual plans by 20 per cent by the year 1965 in comparison with the 1960 production level [48]. Such decisions started from the wish to participate in healthy specialization, as was pointed out by the State Economic Commission: "In case of agricultural machinery, which can be produced domestically only unprofitably, involving an unnecessary drain on our capacities, we must strive not only to slow down their production, but . . . to gradually prepare for the complete stoppage ot their production." [49] The situation was similar in the case of railway waggon production, previously reaching a level of 500 pieces annually, which was wound up in 1962 as the recommendation of the CMEA was eagerly embraced. However sensible these decisions were, it soon turned out that the necessary engineering products could not always be provided by the countries which had undertaken their mass production and export shipment; this forced us to import such products for hard currency for some time; and the restitution of already stopped production became necessary – for example, the production of waggons, stopped in 1962, was resumed in 1964.

Production cooperation, thus, wich made a fruitful and rapid progress in the energy and raw material projects, spread slowly in manufacturing, in spite of new endeavours and a growing number of initiatives. This was true, as we have seen, even for specialization in finished products; so it is understandable that we cannot speak even of the first steps of a higher level of specialization: ". . . the so far passed resolutions on specialization mainly cover finished products . . . in order to achieve a deeper specialization of production the product level specialization should be complemented by a possible specialization in

*The situation, thus, had not changed considerably since the end of the 1950s, as in 1959 the situation was described similarly almost word by word by a report of the Planning Office: "The CMEA negotations have been so far unsatisfactory as regards the lines of specialization and development paths; at present, each state intends to produce all products." [47]

modules or, perhaps, in parts . . . against the difficulties of this stand the economic advantages coming from the thus attainable size of mass production" [50].

In spite of realizations on governmental level, cooperation in the production of modules or parts did not gain ground at all.

It cannot be left out of consideration, either, that production decisions were in all cases determined in the context of the balance of trade and payments. Tensions of the latter required constant cautiousness and in many cases, the requirement of substitution for imports was paramount. The decree of the government in the spring of 1958 calling for economy underlined that "saving measures should, above all, serve improvement of the balance of payments. To achieve this, among other things imports have to be reduced by 30–50 million foreign exchage forints." And: "In order to stimulate economy with imports the Ministry for Foreign Trade introduced a new incentive system. Proposals have been prepared by several ministries for the production of presently imported goods that can be economically produced also in Hungary." [51]

During the mid-1960s it was pointed out, again with the substitution for imports in view: "It must be weighed up whether it is not more advantageous for the national economy when, instead of directly exporting certain engineering products, these are used for developing other branches of the national economy . . . when such production capacities (or their conversion) contributes to the reduction of imports of machinery (perhaps precisely from the West)." [52]

We must not leave out of consideration, either, that the so often quoted Hungarian *production traditions* as levers of structural change proved, in a number of cases, to be but illusions. For instance, the production of energetic machinery (steam turbines, boilers) and of roller frames had long traditions in Hungary, but, as it was realized in 1958, from the 1940s on ". . . they lagged completely behind the development on the world market". The high-voltage electrical machinery industry, which was especially promising in the reorientation, proved to be ". . . the most significant quantitative bottleneck, and of its development it can be said that it is perhaps the farthest behind world standards . . . development stopped in the 1940s . . ." In spite of long traditions in the production of electric railway engines, there had been no progress in this field in Hungary after 1935 and the system produced in an unchanged form proved to be "incapable of development". In comparison with the Ward–Leonard system, developed in the West, "our lag is almost twenty years" [53].

Production traditions, thus, fell short of representing a firm ground for all production branches and products, and failed to be a springboard for the realization of new development endeavours.

The slowness of structural transformation

In spite of the new endeavours after 1956, the above impacts only allowed for a considerably slower transformation of the production and export structure than it was thought in the first years, heated by the momentum and faith of the restart. A report of the National Planning Office put it so in the summer of 1960: "The three-year plan

expected the industrial structure to improve in the direction of a rising proportion of products that can be sold also on capitalist markets and that the growing need of the national economy for imported raw materials would be covered by the increase of machinery exports in the first place . . . Although the volume of industrial production surpassed targets of the three-year plan in each year, the tensions in a large part resulted from a *slower transformation of industrial structure* than the rate of growth of industrial output." Though investment and the stepping up of production from 1959 on caused "the additional investment to contribute to the overfulfilment of the production plan target of industry, it hardly served the overfulfilment of basic, industrial objectives of high priority" [54].

Speeding up of the transformation of the engineering industry, one of the important potential carriers of the structural change of industrial production and exports did not come about in the following period, either. The lag of the engineering industry and the tasks of development were discussed by the Central Committee of the HSWP in the summer of 1962, but this was not followed by an acceleration of restructuring; in fact, engineering even lost some ground so that during the years of the second five-year plan no modern, new engineering establishment was built. At the end of the plan period, the Political Committee could summarize: "After the decree of the Central Committee, the necessary, but faster than planned development of the chemical industry was achieved, owing to the bad weather agricultural products had to be imported, and our military technology was modernized." [55]

A thorough analysis of the situation made in the mid-1960s accounted of a significant frustration in the realization of the industrial policy objectives declared a decade ago, particularly because of the lack of success in the structural change in manufacturing, especially in engineering production. "One of the chief objectives of our economy is the structural transformation of production . . . such a structural change was aimed at that would reduce the import demand of production, especially that for imports from capitalist countries. During the period of the second five-year plan the import intensity of material production is increasing, instead of getting lower" [58] – the facts were accounted. As it was calculated in the Spring of 1965, for a 26 per cent increase in national income, an increase of 53 per cent of imports was absorbed. While in 1958 to produce in industry one thousand Forints' value of output 41.4 foreign exchange forints' value of raw materials, semi-finished products, and parts had to be imported; this increased to 42.5 by 1965.

The ambitious plan for machinery exports based on a new structure, on new branches and products could not be realized. It was pointed out in the spring of 1965, that "The experience of the second five-year plan has shown that opportunities in this field were overestimated." In fact, the 43 per cent growth of machinery exports was considerably surpassed by the 78 per cent increase of material export and by the 85 per cent increase of industrial consumer goods export [59].

Similarly to the slow progress of structural transformation in manufacturing and, within it, in engineering, in spite of the numerous important achievements, the realization

of often excessive and illusory plans* for the raising of the technological standards of production also encountered obstacles.

The application of the most advanced technology would have demanded, namely, a complete elimination of autarkic features and the realization of up-to-date mass production in large series through large investment concentrated in a few fields. This was only possible in a small number of fields, though even there only partially. The production of energy and raw materials, tying up significant resources, the ambitious plans for a more extensive substitution for imports and the realization of such plans, and the limits to the international division of labour combined represented a considerable obstacle in the way of attaining the modern technological standards of the time. This was formulated by an expert in the spring of 1960 as follows: "As regards the struggle for the attainment of the internationally leading technology and the level of productivity, and the stimulation to achieve them there is, in my view, no concrete, purposeful activity in Hungary." [60]

Although more or less true, this opinion was still somehow too generalizing. For, from the end of the 1950s on, significant, conscious and, later, wide ranging efforts were made to renew the technological standards of the economy. As against the former practice of development based upon new investment projects, this new tendency was asserted by emphasis on renewing (modernizing) investment. As it was expressed in 1959, "The three-year investment plan has a certain reconstructive nature, but this is mainly applicable to the reconstruction of certain large-scale establishments, and the stress is, here as well, on the extension of production capacities."

At the beginning of 1959, the government's Economic Committee discussed the program for the modernization of fixed capital assets and gave a deadline at the end of July that year for the elaboration of the plan for modernization: ". . . the program for the modernization of the fixed capital assets of industry, transport, and of (agricultural) machine stations has to be elaborated gradually. As a first step, the modernization program of certain industrial branches, and groups of enterprises should be prepared, then, on the basis of the experience with these, the scope has to be widened." [61]

This tendency was not limited to the end of the 1950s, the period of the second three-year plan, but was carried on consistently in consecutive plans as well. The proposal for the development directions of the second five-year plan stated, also for the first half of the 1960s: "The plan for the development of industry is of a reconstruction character: 67 per cent of envisaged investment serves the reconstruction or expansion of existing plants." [62]

This triggered the renewal of considerable areas of the Hungarian manufacturing industry, of whole branches.

As it emerges from the above, industrialization policy in the decade after 1956 underwent a very significant change. In spite of the considerable structural changes

*It was declared by the Ministry of Metallurgy and Engineering at the beginning of 1960: "It is our objective that, through tough, institutional, planful work, *we shall completely make up for our technological lag until the end of the five-year plan period.*" [58]

among and within branches, however, the nature of industrialization persisted. Industrial development was, invariably, characterized by extensive, quantitative growth and bore the typical stamps of a policy which we may call the second phase of import-substituting industrialization. Import-substituting industrial development was adopted by Hungary and the other East-Central Europe countries after World War I, the first phase of which, between the two World Wars was characterized by the elimination and substitution by domestic production of hitherto imported foreign consumer goods, light industrial products. The second phase of import-substituting industrialization began in the years of the war and the subsequent reconstruction; it was given an impetus by the industrialization policy of the socio-economic transformation from the turn of the 1940s–1950s on. This phase was characterized by the objective of the fullest possible self-sufficiency in domestically produced industrial raw materials (intermediary products). A concomitant of this was establishment of the production of the widest possible range of investment goods and also embarking on the production of consumer durables produced by the heavy industry.

Although during the 1950s a very one-sided practice of the second phase of industrialization was adopted, the main direction of development still characteristically resembled the strategy chosen worldwide. For, besides the countries of East-Central Europe following the model of Soviet industrialization policy, such an economic policy was characteristic of most of the Latin-American countries, among them, of Brazil, Chile and Uruguay as well as of many Asian countries, first of all, of India. A series of backward, less or medium developed countries attempted to break out of backwardness, to catch up with others in this way in the middle of the twentieth century [63]

When we leave the specific characteristics of the industrial branches out of consideration, and set out from the general features of the second phase of the import-substituting development, we find that the structural changes of Hungarian industry after 1956 left the basic characteristics unaffected. The main development projects, absorbing the most significant resources, remained of an import-substituting nature and the replacement of import, as we have witnessed in the cases of ferrous metallurgy, the chemical and even the machine-building industries, has kept its economic-political value. Of course, the revision of the one-sided coal, iron and steel programs made more room for other branches of energy and raw material production (especially for electricity generation, oil and natural gas extraction and processing, and, perhaps to the greatest extent, for the production of raw materials for the chemical industry). However significant these changes were, the newly preferred branches are invariably representatives of the second phase of import-substituting industrialization. In processing industry only relatively modest changes were achieved and, on the whole – with the exception of a few products – the launching of the production of a few, but mass-produced, up-to-date, competitive products, saleable on external markets, and integration into the international division of labour did not materialize. The breakthrough of, let me use this term, the *policy of an open economy* did not take place, though such endeavours were made and partial results were achieved notwithstanding; such a policy is an opposite of import-substituting industrialization in

that the leading branches of the economy, of the industry are export-oriented. A small number of such branches could be competitive on the world market from the aspect of technology and quality as well as of profitability, while in other branches of the economy and industry the external economic orientation could be complemented by protectionism and import-substitution. Because of the lack of such policy of open economy, because of missing or weak export-oriented, vanguard branches, the export potential remained limited and the problems of the balance of trade and of payments were rendered chronic by the large volume of demand for imports. All this kept the self-sufficiency in manufactured goods as a requirement in the focus, and this was hardly changed by the existing objectives and programs with opposite aims.

These traits were especially consolidated and asserted by the basically unchanged economic mechanism and stimulating system of industry. It followed from the essence of the import-substituting development policy, served by the applied economic mechanism, that substitution for imports by domestic production remained the supreme economic value. As a result, in spite of efforts and declared principles to the contrary, the costs of domestic production, the technological up-to-dateness and quality standard of products remained of secondary importance. Although the principles, consciously declared in Hungary in the 1950s to the effect that economic aspects were of secondary importance, were squarely rejected from the turn of 1956/57 on and endeavours to the opposite were made, following from the economic policy (and its mechanism that was kept basically unchanged) such endeavours ran into the concrete wall of reality and mostly failed. Similarly, the characteristically high investment intensity of the second phase of import-substituting industrialization reproduced the tendencies of overheated investment activity, in spite of the endeavours of economic policy. It must be added, however, that the priority given to the living standards policy put limits to the excessive tendencies and was capable of counterbalancing them on the critical spots. Again, this policy of industrialization caused the tying up of such resources in the allocation of investment funds that hindered the development of other branches. This was also partly counterbalanced by the consistent assertion of the agricultural policy with its special political importance.

The formulation of an industrialization policy, really taking into account the endowments of Hungary, her dependence on foreign trade, the domestic resources and the labour power, could be achieved only in its certain elements, under such circumstances, if to any extent. Hungarian industry could not break the vicious circle created by the increasing energy and raw material demand following from the development path of the second phase of import-substituting industrialization which, from time to time, compels the economic policy to reinforce the self-justification of this circle by subordinating other economic fields to this demand.

Nevertheless, as we have seen, important new features were emerging. Even though slowly, a healthy structural change and technological modernization started. This decade, in the final analysis, was a period of slow and gradual reassessment of extensive, import-substituting development and a prelude to its transformation. New vanguard, export-oriented branches were taking shape, even if not unambiguously and directly. The

first traits of the policy of an open economy began to crystallize. It is no small achievement that this brought about constant criticism of and continuous efforts at correcting the prevailing planning and control system that preserved countervailing tendencies and hindered progress.

The process of the structural transformation of industrial production, though carrying the characteristic contradictions of a transitory period, has started.

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ПРЕЕМСТВЕННОСТЬ И ИЗМЕНЕНИЯ В ИНДУСТРИАЛИЗАЦИИ ВЕНГРИИ ПОСЛЕ ПОВОРОТА 1956—1957 ГГ.

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После преодоления тяжелого политического кризиса 1956—57 гг. в венгерской политике индустриализации стали заметны новые стремления. Новая концепция разрабатывалась и осуществлялась прежде всего в ходе практического планирования. Руководство страны должно было в трудных условиях проводить в жизнь основные принципы этой политики, такие как пропорционально-гармоничное развитие различных отраслей, отказ от курса на самообеспечение, выдвигая на передний план вместо количественного роста техническую модернизацию, налаживание массового производства конкурентоспособных в экспортном отношении и воплощающих высококвалифицированный труд изделий вместо материалоемкой продукции.

В целях пропорционального развития особо важное значение придавалось преимущественному развитию энергетической и сырьевой базы. На осуществление новой энергетической программы шло 40% промышленных капиталовложений. Экономическая политика стремилась сойти с пути, по которому пошло развитие производства основных материалов в 50-е годы. Однако, тем не менее, необходимо было продолжать, хотя и с меньшей интенсивностью, начатую и незавершенную программу развития черной металлургии. Наиболее характерной новой программой этого периода была программа развития химической промышленности, на которую приходилась 1/6 часть капитальных вложений промышленности и в ходе осуществления которой быстрыми темпами создавались новые отрасли тяжелой химической промышленности. В конечном итоге около 3/4 капиталовложений промышленности шло на осуществление программ в области производства энергии и сырья. Такое развитие характеризовалось стремлением к замене импорта, но одновременно с сокращением ввоза основных материалов оно значительно повысило потребности страны в импорте сырья и энергии. Кроме того, оно сократило возможности для осуществления преобразования структуры обрабатывающей промышленности, что в принципе выдвигалось как важнейшая и первоочередная задача. Это лучше всего видно на примере машиностроения. Не удалось достичь намеченной степени развития некоторых выделенных отраслей машиностроения с ориентацией на экспорт. Неудачу потерпела дизельная программа, которой придавалось центральное значение Возможности международного сотрудничества также создавали ограничения и только в немногих областях (программа производства автобусов) удалось добиться успехов.

Несмотря на изменения в политике индустриализации за десятилетие, прошедшее после 1956—57 гг., все еще не удалось изменить прежний односторонний характер развития, нацеленный на замену импорта. Однако преобразования начались и, пройдя через ряд этапов, привели к разработке политики открытой экономики.

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HISTORICAL DEVELOPMENT OF THE HUNGARIAN SYSTEM OF ECONOMIC CONTROL AND MANAGEMENT

In the background of processes and political changes in the Hungarian society the growing (even if not determinative) role of the development of the economy, sometimes of its minor or major shocks can be found. The idea of a profound reform of the economy based on directive planning successfully eliminating social control but producing grave tensions – emerged several times from 1953 on, but it could be successfully implemented only in 1968. The reform of 1968 proved to be ambiguous: it left the institutional system of economic control, the organizational structure of enterprises and the stock of cadres unaffected, which soon led to the revival of control methods similar to directive planning. The economic difficulties appearing in the late seventies, which have stopped the 15-year rise in living standards, and have slowed down the promising development of the infrastructure, again render it topical that the reform should be carried on.

After World War II, following the coming into being and mainly the stabilization of the new power an increasing role of economic development, sometimes of its smaller or greater shocks, could be more and more found in the background of processes or political changes going on in the Hungarian society (even if this role has not always been determinant). Changes in the system of social (and power) relations based on the organization of the economy, i.e. in the economic mechanism – in a longer run its unambiguous development – provide a synthetic picture of the development of the entire society, though not a complete one in all respects. Therefore, I try to outline in the following the development trend of the Hungarian economic mechanism as a logical model whose most important points may be verified also historically (despite the fact that this logical model is to some extent a reflection of my *Weltanschauung*).

Economic mechanism and its development

The notions economic mechanism or the functional model of the economy used in a similar sense were accepted in the mid-1950s mainly in Polish and Hungarian economic literature. By this an abstract expression of basic principles of the functioning of the economy is meant as a category deduced from production relations.[1] Its decisive element is the ensemble of automatisms, behavioural and reaction norms influenced by a definite

[1] A definition in a broader sense of the economic mechanism was first formulated as far as I know by W. *Brus* [1]. The notion of economic mechanism was used in a similarly broad sense also by Tamás *Nagy* in Hungary.

system of power and interest relations that shows a relative stability. To the notion of economic mechanism belong also such factors influencing the functioning of the economy that may be affected by central control agencies only indirectly, through the mediation of processes capable at least partly of self-movement, as, for example, the real distribution of decision-making possibilities among organizations and decision levels – mostly deviating from formal ones –, the practice of top level decisions, motivations of persons placed at various levels of the hierarchy of the division of labour or the system of enterprise relations. It is precisely this acknowledgement, expressed also by word usage, of the self-movement and spontaneity of processes centrally determined eventually in all details, that explains the aversion to the notion of economic mechanism arising from time to time.[2]

Practical experience unambiguously shows that within the framework of a given mechanism the possibilities of economic policy to influence relevant characteristics of development are strongly limited.[3] Namely, the power positions, the resulting primary interests and relations, thus possibilities for enforcing interests as well as permanent behavioural and reaction norms of organizations and persons formally participating in decisions and capable of influencing these decisions – including of course also those preparing economic policy decisions – do not change considerably at such time. Economic policy decisions assessing and ranking needs as well as organizing the distribution of resources, with practically given interest relations, may be suitable within certain limits for shaping the structure of production, consumption and foreign trade – mainly the macro-structure –, but in this way such qualitative goals may hardly be attained as to increase the adaptivity of the economy, to reduce and to suppress the 'hunger' for investment, in general, characteristics of the shortage economy, to improve on the merits the spreading of achievements of technological development.[4]

[2] The excessive emphasis on the role of central consciousness is indirectly relfected by a way of thinking expressing the priority of economic policy over the economic mechanism, which is, by the way, a concomitant phenomenon of debates on reform, too. Into this logic, instead of "economic mechanism" rather the notion of "economic control and management" fits as a tool of economic policy for attaining certain goals. (See more detailed in [2]).

[3] There are various interpretations of economic policy in Hungarian economic literature. Either the system of most general goals is called economic policy, or rather concrete conscious interventions in economic processes – relating mostly to the medium run – (to some extent simplifying the basic goals of long and medium-term plans and the actual tools of realization). Of course, everyone posesses a fairly great autonomy in the definition of notions, but in my opinion the latter concept is more expedient and unambiguous: it can be measured in the practice only in this way how adequate economic policy is as a conscious activity.

[4] The relationship between economic policy and economic mechanism was interpreted by the late István Friss not exactly the same way: see the chapter on "Economic policy and mechanism" in the book of the authors' collective led by him [3]. According to this, if processes opposite to endeavours of the economic policy are developing in the economy – and this cannot be excluded – then sooner or later such tensions will arise that will trigger if necessary also political correction mechanisms into action which may then channel processes deviating from the intended ones in a proper direction. (This statement obviously holds only under such circumstances – in socialism – when economic policy is

Really important path corrections of socio-economic development are achieved in the form of transformation of the economic mechanism, mostly by means of slow evolution. Sometimes it occurs, however, that far-reaching ventures and reforms of great importance and usually involving also significant political risks (thus often failing) initiated by the highest political and economic leadership are starting points for the development of the economic mechanism.

Radical changes in the economic mechanism are never brought about by favourable possibilities, but by some urging necessity manifesting itself in the form of lasting economic difficulties and/or instability indicating considerably diverging opinions even within the political leadership. Changes of reform character and initiated from above are characterized by the circumstance that this emergency situation is somewhat foreseen by political leadership even prior to the turning of economic difficulties into social tensions (or prior to taking a series of centralizing emergency measures aimed at eliminating social conflicts). This emergency situation recognized in due time involves, simultaneously and in a contradictory way, the intention of changes and graduality – i.e. of avoiding the necessity of even greater changes with uncertain outcome. Therefore, the development trend of the economic mechanism is by no means straight (and will not be so in the future, either).

The structure-transforming role of the system of directive planning in Hungary

The starting point of the transformation of the economic mechanism in Hungary was directive planning having functioned in a completely pure form only prior to 1956. Its most important feature was a consistent realization of monolithic hierarchical dependency as a principle of organization. From this resulted the enforcement in the entire economy of a decision-making mechanism that may be characterized by the determined role of bargaining relations between parties in sub- and superordinate relationship. The importance of – market or social – agreements between parties with equal rights was either insignificant or without any real content at least according to formal rules of the system. The intention of integration into the system of hierarchical relations and thus into the sphere of action of central structural policy explains the establishment of large organizations also in fields where this is explicitly irrational from the economic viewpoint – e.g. services for the population. This enabled the control of processes through directives. This control was not limited to strategic decisions, but functioned

capable of influencing all relevant processes, that is the entirety of economy.) In one of his later articles [4], however, the author does not exclude the possibility of such lasting processes any more that are deviating from economic policy intentions in so far as interests of important organizations, groups or people do not coincide with economic policy objectives. This means that tensions resulting from divergences between plan and reality will not necessarily be dissolved in the form of processes adjusting to plans. Practical experiences support this latter standpoint of István *Friss*.

practically as a tool replacing the market and continuously harmonizing production regulated by detailed instructions and centrally acknowledged needs. It is no chance that in the 1950s the system of premia and sanctions was linked with quarterly plans on which plan bargains were going on.[5]

This organizational principle enables the elimination of social control more or less successfully, though it does not ensure a full realization of central concepts at all. This asserts itself everywhere where under normal conditions the functioning of the economy whould be directly influenced by the market and social environment, thus limiting the intention of the central apparatus to transform economic structure and through this, of course, also society. Excess demand with stable consumer prices, lasting shortages in current consumer goods are "stimulating" consumers for forced substitution, i.e. to buy goods available at any time, to get rid of money and not to save. With real representations of interests missing – and partly in consequence of excessive labour supply – the labour market will mean no effective barrier to production policy decisions aimed at structural transformation, either.[6] Reorganizations subordinating enterprises manufacturing homogeneous product groups to a uniform control and management reduce the possibilities of choice of user enterprises practically to zero. The chain of user enterprises and also consumers will become strongly dependent on the complicated, multi-level apparatus of production control and management. Namely, economic units are affected by domestic and external market relations not directly, but through a higher-level mechanism reconciling interests. In the lack of self-correction mechanisms any significant deviation from the plan threatens with anarchy (as it actually happened in several partial fields) and this also contributes to the inner inertia of the system.

Autarky resulted not only from the international political situation in the given period, but also from the deeper logics of the centralized economic mechanism. This is proven by the fact that despite changing circumstances autarkic endeavours keep re-emerging at enterprise, national economic and also CMEA levels. Self-sufficiency and the administrative dependence of organizations ensuring production conditions mean the only efficient guarantee against shortages, uncertainties and defencelessness.

All these circumstances together offer wide possibilities to a control of the economy from the side of production policy and eliminate economic and mainly social obstacles to a radical transformation of macro-structure within a short time. Of course, all this does not mean the enforcement of some central will floating above partial interests.

[5] An exact and thorough description of the practice of planning may be found in János *Kornai*'s book [5].

[6] Economists acknowledging the (limited) functioning of the law of value in socialism consider the consumers' and labour markets a typical sphere of decisions where decisions are decentralized from the very beginning, independently of the type of the model. Namely, neither rationing, nor administrative labour management can be maintained in a longer run (cf. e.g. W. Brus [1]). In this logics it seems as if decisions decentralized by their nature meant a natural social control of economic policy. V. *Narojek* [6] interprets the centralized system of control and management, though using an abstract non-economic terminology, still in a similar way as I do.

Partial interests may be enforced through distortion of information flowing "upward", by increasing the material intensity of production or the degree of cooperation, by building up inner reserves, through manoeuvres, looking for supporters or several ways of blackmailing. But, on the other hand, control agencies try to neutralize such effects by increasing centralization which, again, leads to a multiplication of plan directives and prescription, we would say at present: to "over-regulation". The main point is that subordinate organizations (or in another dimension: persons) are facing the higher levels of the hierarchy in an isolated way, thus there is only a little chance for the development of any community of interests. Nevertheless, this is the natural way of enforcing interests: thus, for example, an enterprise has a better chance to obtain some allowance granted specially to it, than by means of a coordinated action "creating precedent" (not to speak about the fact that in case of such an open action personal contacts of decisive importance on such occasion become mostly useless).

Saving of consumer capital is an immanent characteristic of the system built up, and that was expressed not so much by the diminishing volume of output – measured in real terms – and the consumption of services, but by the quality of services, the lack of stocks required for properly meeting consumer demands, of capacity reserves and commercial network, by standardization enabling a productive manufacturing of consumer goods and restricting alternative possibilities of choice of consumers, i.e. by a high flow-stock ratio.[7] Mária *Augusztinovics* [8] proves that the decisive source of industrial accumulation was the saving of consumer capital (and not a reduction of the level of real wages). It may be also proved that in the struggle for obtaining investment possibilities and resources the bargaining positions of organizations representing non-productive spheres – i.e. not producing additional national income – are always weaker. It is likely that indirect methods of restricing consumption – influencing quality, possibilities of choice, the time required for obtaining goods or services – bring about smaller social tension than an explicit reduction of real wages – at least in the short run.

It is another – though temporary – factor supporting the viability of this system that with a consumption level similar for the overwhelming majority and guaranteeing a level "around subsistance" the distribution system conceals social inequalities. It is by no means unambiguous that the low level of housing rents and service fees, or the low price of shortage goods help those with low income. Subsidized prices are advantageous for layers that may obtain shortage goods and services without any problem and in a quality exceeding the average. This refers first of all to the allocation system of flats that has made such advantages inheritable after all. Anyway, these systems of distribution made the necessary social sacrifices more acceptable for society together with inequalities that may never be fully eliminated (what is more, are explicitly extreme in case of a narrow layer).[8]

[7] This is shown by Éva Ehrlich [7] by using the comparative method in physical terms of Ferenc *Jánossy*.

[8] Zoltán *Vas*, a leading politician of the 1940s and 1950s refers in his memoirs [10] to the fact that top leaders enjoyed unlimited free supply beside a nominal salary paid to them.

The concealed way of expression of partial interests with reference to some higher interest in each case, endeavours aimed at suppressing alternative thinking, extensive bureaucratic control aimed at substituting control by the market and society, the increasing gap between ideology and reality, the rapidly developing atmosphere of suspicion and fear brought several distorting factors into systems of social relations and especially into the behaviour of people who had already attained a higher rank in the social ("office") hierarchy, and this is perhaps the most serious inheritance of the traditional planned economy.[9]

The system of directive planning proved to be suitable for an almost complete realization of central redistribution, thus for starting socio-economic movements of unbelievably great intensity that would most likely never have taken place on the basis of an organic development or self-movement. The radical transformation of the structure of investment was carried out within a very short time.[10] All this resulted, of course, not from some macro-level foresight or social consensus, but from the pressure narrowing down possibilities for choice of organizations and individual persons to a minimum. While a large-scale autonomy is realized in the development of macro-social and economic processes, such individual abilities as enterpreneurial ability, innovation, inventiveness can be mobilized only with low efficiency, social control is given a subordinate role and several social distortions are brought about which are difficult to overcome ever since then.

It cannot be proved that under specific East-European circumstances this model of economic and social organization is the only possible form of launching the industrialization process, but it is undoubtedly suitable for the acceleration of economic growth and is a viable economic mechanism with considerable self-preserving force. This is verified – anticipating now further explanations – by several relevant features of the system, first of all by its monolithic hierarchical character, and several behavioural rules resulting from this are still "in force" despite circumstances changed in several respects.

Emergence of the reform concept

Concepts on an overall reform of the economic mechanism had already been elaborated in Hungary long ago. In 1953 some members of the Planning Office elaborated reform concepts on behalf of the Government in harmony with the June, 1953 resolution of the Central Leadership of the Hungarian Working People's Party correcting the first five-year plan, laying greater stress on industries manufacturing consumer goods and

[9] János Kornai deals with the effects of over-centralized economy distorting social relations in a special chapter of his book [5].

[10] Mária Augusztinovics [9] presents in her article the far-reaching consequences of increasing investment in the heavy industry at a very fast rate and, simultaneously, of capital withdrawal from the service sector, relatively highly developed at that time.

agriculture, furthermore, with modest endeavours to increase local initiative. The concept on a further development of the mechanism was a part of those on long-term economic development. The concept could not be discussed on its merits amidst the fights for power with permanently changing outcome [12].

Works of György *Péter* published between 1954 and 1956 already contain mature reform concepts which do not deviate considerably from the major features of the 1968 reform. He clearly formulated those principles (profit motive, prices controlled by the state, but still moving within certain limits following demand-supply relations, interrelations between plan and market) which have become bases of the 1966 resolution of the Central Committee of the HSWP on economic reform, too. Of course, the terminology used by György Péter deviated from that of later reform proposals, his formulations were sometimes more cautious according to the contemporary atmosphere, but as a matter of fact the essence was about the same. At the same time also several other proposals fitting into the reform concept were formulated proving that the idea was already spreading among economists, though not very widely, and it was no more quite alien to the central state apparatus, either [13].

In 1957 the Government commissioned Professor István Varga to form an Economic Experts Commission headed by himself, that elaborated its reform proposals with the concentration of significant intellectual capacity. These were more modest than the reform of the mechanism introduced in 1968 after all (only a partial elimination of central allocation of materials and thus also of compulsory plan targets was envisaged, the strictly centralized planning of almost all investment projects would have been maintained, etc.), but as regards their character they undoubtedly coincided with guidelines of the later reform.

It clearly turned out from the projects made for the Government, especially in the course of debates, that a considerable part of participants was aware of the relevant problems of the system of directive planning (not only theoreticians, but also those who had previously participated in the work of the government), that is, the overwhelming majority did not believe that the numerous and repeating difficulties were caused by wrongly selected plan targets, eventually by exaggerated elaborateness. It is interesting that despite this those in favour of the reform concept – István Varga, László Faragó and György Péter being the most consistent ones – were in a minority after all. Especially great aversion was brought about by István Varga's proposal according to which central material allocation would have been replaced by credits on circulating assets to be granted at a very high, 18–20 per cent rate of interest with a simultaneous elimination of compulsory plan targets. Namely, the majority of the members of the Commission could not see any guarantee for a planned economy under such circumstances and supposed that elimination of compulsory tasks would bring about immediately an anarchy.

Contrary opinions were typical and they keep returning also in later reform debates from time to time. Accordingly, it is not a reform, but an economic policy or structural policy corresponding to our particular conditions that is neded. At first equilibrium, consolidation and the formation of adequate reserves should be sought after and far-

reaching changes may be initiated only afterwards. One should not think about ideal reforms that could be introduced only in a very long run, but the given system of economic control and management should be modernized through consecutive smaller changes, which, then, may become considerably more efficient than it proved to be in the first part of the 1950s, if it were run in a more rational, enlightened and elastic way. It was also formulated as a contrary argument that the various apparatuses were unable to carry out different changes affecting the entire economy simultaneously and in a coordinated way; there was a too great risk, etc.

Two important conclusions, presumably characteristic of all reform proposals, may be drawn from the debates. On the one hand, contrary arguments to reform proposals have always been formulated again and again, indicating that they do not follow from the given situation of an economy, but are or may be raised independently of space and time concerning any changes that are not restricted to a given tool of control and management or to a given field of the economy. The weight of pros and cons was proved not so much by economic facts, but by political and power situations. (This could be strongly felt also in the behaviour of those participating in the work of the Commission.[11]) This is spectacularly shown by the fact that the suppression of reform proposals was soon followed by an ideological condemnation of representatives of the concept – even though not by their denunciation any more. Another important experience is that members of the Commission had radically deviating ideas about the reform. According to one of the typical assumptions central objectives elaborated in detail also further on and ranked by economic policy should be made enterprise objectives by means of financial tools (prices and stimulating measures) similarly to the "Lange-Lerner solution". Another concept – represented in its entirety only by György Péter – assumed a natural selection of partial objectives on the ground of a functioning market mechanism.

After all, reform proposals were put into the files and another way of consolidation was realized whose reasons should not be sought after in that the given economic situation would not have been suitable for the reform of the economic mechanism. There had developed a situation where political consolidation could be carried out also without this. But, after a relatively short time, in the course of a much more sober development free from extreme fluctuations and from setting unrealistic objectives, the characteristics of forced development made their way again, followed by increasing economic difficulties.

As to the development of the economic mechanism the "tactics of small steps" suggested by István Friss was realized. With the introduction of the system of profit-sharing in 1957 and the reduction of the number of plan targets the building of incentives simulating commodity production into the framework of an already less rigid planned

[11] In a chapter of his book [3] dealing with the relationship between economic situation and economic mechanism István Friss took a stand even ulteriorly that the reform outlined by István Varga had not been topical in the given economic situation. Even if this statement had been true – that is not very likely –, it was not the reason why the reform concept was struck from the agenda.

economy has begun. In a more realistic and stable system of directive planning it was necessary that the authority and power of sectors and big enterprises having also political weight and connected with party and state administration also through personal contacts should increase.[12] The feature of the centralized system gradually asserted itself that instead of the central manageability of processes the role of organizations mutually determining each other at various levels of the hierarchy became characteristic. There was a feeling as if nobody had a real possibility for decision-making. All this brought to the fore the creation of big-enterprise organizations that carry out organizational measures in a centralized form and are also capable of fulfilling the functions of lower levels of hierarchical control (of industrial directorates).[13]

This was undoubtedly a development process in so far as it made the given system tolerant, a little wider possibilities were given to enterprise initiatives (it is more proper to speak about this than about independence) and these slow changes helped in putting the reform proposals on the agenda again. At the same time this direction of development has led in a certain sense into a blind alley since it created such formations and structure (vast organizations on one side and the lack of small enterprises on the other) that have been the strongest barriers to later development and to the real functioning of the market perhaps even up to now.

The 1968 reform and its contradictions

Following the slow evolutionary process through which the system of directive planning became more tolerant the HSWP initiated an overall reform of the economic mechanism in 1965.[14] This took place in consequence of difficulties arising not only in Hungary, but also within the entire CMEA in the early 1960s and partly resulting from the fact that the central manageability of economic processes weakened.

The reform of the economic mechanism was introduced in 1968 under ambiguous conditions. From this aspect not so much the "brakes" strongly emphasized in contemporary analyses and documents (relatively great weight of official price control, extensive system of subsidies, obligatory division of profits and prescriptions for trade in certain products) had an important part. Namely, it should be considered as natural that endeavours were made to solve the change-over to an economic practice greatly deviating from the previous one gradually and with an aim to ease tensions concomitant with such a change-over.

[12] This is stated, e.g. by K. A. *Soós* in his article [14].

[13] The process, its reasons, background and interest motives are analyzed in detail by Éva *Voszka* in a study [15].

[14] The concept of the reform was elaborated by commissions organized by the Party and made up of practical and theoretical experts similarly to preparatory works in 1957. The difference was that this time everybody agreed that the reform was needed as the reform proposal enjoyed unambiguous political support.

It was a much more important issue that the institutional system of enterprise organization and management as well as cadres did not change. This meant, at the same time, that the system of personal relations built up in the previous economic mechanism remained untouched. It is not likely that the preparation of the reform of the economic mechanism was characterized by such far-reaching consciousness that clearly recognized that transformation and prevention of the re-establishment of the existing decision making mechanism – together with the bargaining between enterprises and control agencies – were much more important issues than economic rationality in itself. However, the assumption is surely wrong, too, that deficiencies of the institutional system and the decision making mechanism were not reckoned with at all. It was clearly realized already with the introduction of the reform that – even despite modifications in the scope of the decision making authorities – this was one of the most serious contradictions of the reform. The transformation first of the system of enterprise organization, then within a short time also that of the organizational system of industrial control and management was actually planned. However, these remained only some weak attempts in the enterprise sphere after all and the transformation of the institutional system was taken off from the agenda.

Thus, the reform eliminated compulsory plan directives, but did not abolish the comprehensive system of hierarchical relations, thus the development of a real market could not be spoken of, either. This ambiguous situation characterized the processes going on after the introduction of the reform. Following some years of transition and uncertainty the newly developing system breaks down financial regulators and prices instead of directives and governs instead of prescriptions with expectations for the implementation of which managers are not called to account formally. (They are less strict than commands, but mean much more than "I should like you to . . .") One-channel dependence (on the branch ministries) is replaced by a simultaneous dependence on several control agencies. This makes the control of processes more complicated, but increases the manoeuvring possibility of enterprises together with the clumsiness of the system. The system of "expectations" is complemented by market and profitability constraints as additional conditions. (There is a difference between the two categories, namely, the profitability constraint means that eventual losses or the "profit demand" necessary for the fulfilment of obligations towards the state have to be approved by and bargained with the control agencies in advance, while the market constraint means that the state does not undertake the guarantee of realization beyond any limit, though it often provides for the superiority of producers and the maintenace of monopolistic situation.)

These seemingly small changes are not insignificant for the functioning of the system. "Expectations" more elastic than directives, a possibility for manoeuvring among various control agencies, a greater freedom of movement of enterprises, the appearance of complementary activities other than the main production line, etc. made the system suitable for clumsy accommodation to slow changes in the economic environment. Enterprise initiatives – which it would be an exaggeration to call enterprising, since they

have to be reconciled with various control agencies and social organs – have become an important, perhaps indispensable element of the system. Thus certain reserves could be mobilized in a period when slow changes in the world economic environment and a favourable economic situation for several years anyway promoted the utilization of possibilities inherent in the reform. The spreading of the so-called second economy (that, as a matter of fact, did not begin with the reform, but considerably accelerated following it) mitigated shortages at important points. All this largely contributed to a balanced and fast development as well as to a spectacular increase in consumption which characterized the years following the introduction of the reform.

Later on, after 1974, the acceleration of environmental changes could no more be synchronized with the sluggish adaptability brought about by the reform. Namely, the unwritten "expectations" frequently changed and became uncertain. Administrative or semi-administrative solutions characteristic of the previous practice of control and management have come to the fore as reflex-like reactions (action programmes, campaigns for saving, etc.) [16].

Another characteristic feature of the system is that it has become strongly *status-quo-oriented.* (This was characteristic already in the 1960s and has become more and more a basic property of the system.) Stability taken in a very broad sense has become a fundamental value, an element regulating the functioning of the system even if not exclusively, yet primarily. A decision-making mechanism relying more and more on mutual determination and a system of many-sided dependency relations orientates towards stability from the very beginning. Any initiative breaking unwritten rules or upsetting the developed complicated system of organizational and power positions may lead to a sharpening of conflicts with uncertain outcome. Any new attempt of enterprises – bringing about considerable development, changes in production line, rearrangement of inter-enterprise relations, imports, etc. – suddenly increases the pressure on control agencies and protectors, in general, to coordinate the uncertain conditions. (This is not the usual uncertainty on markets, but various permissions, approvals, sometimes arbitration of control agencies between enterprises are needed.) Endeavours for stability lead in some cases to dullness with proposals of control agencies, to changing radical concepts into small corrections, or to a situation where concrete concepts become long-term ideas eventually never realized. Enterprise initiatives requiring central approval or support will result in long decision processes with many participants and of bureaucratic character, the blurring of responsibility and in the killing of enterprising.

The ambiguous conditions of the reform implied the posibility and even the necessity of a process of rearrangement that began within a very short time. This was independent of world economic difficulties, but began already prior to the price explosion. It is a fact, of course, that unfavourable external conditions further accelerated this process and led within a short time to strictly centralized management with a simultaneous increase of disturbances in the functioning of the system. As a final result of the rearrangement process a "mechanism of breaking down regulators" has developed since the mid-1970s formulated basically in price and financial terms (nevertheless not averse to administrative tools, either).

The reform process should be continued

Since the mid-1970s the situation of the Hungarian economy has become more difficult and deteriorated again. There are already several signs indicating that it would be topical to deal with the idea of further development of the reform. Real conditions of the functioning of the market should be created by developing such organizational and institutional framework that will allow the development of the autonomy of the enterprise sphere in face of control agencies and give guarantees for the maintenance of this situation. A venture of such type can, of course, not be carried out with small steps. Far-reaching and coordinated transformations affecting the entire economy (what is more, not only the economy) and all types of organizations are needed. Without this we may not succeed in breaking out from the "magic circles" of stout hierarchical control having considerable self-preserving force. The existence of these magic circles is verified by the fact that, despite all intentions and determination, the differentiated, individual and frequent interventions could not be eliminated, nor the redistributing role of the budget narrowed down, at least not if we wished to achieve this actually in the near and not in the remote future. Practical experience shows that we have not succeeded in operating the price mechanism consistently either: the number of rules referring to price formation or price changes deviating from the general ones seems to increase almost regularly and the sphere of their action is widening. Differentiation of rules and various concessions are destined to compensate for the schematism of the system. And this is so despite the fact that precisely in 1979 and 1980 really far-reaching changes took place in the Hungarian system of economic control and management. Namely, "small steps" are unavoidably adjusted to the practice maintained by the hierarchical system.

Social and economic factors justifying further development of the reform – though not making the consistent realization of decentralization the *only available alternative* even at present – may already be well recognized nowadays:

(a) experiences of the last few years have indicated that an external equilibrium (non-negative balance of foreign trade) may be achieved in Hungary only with stagnating or slightly diminishing real incomes as well as decreasing investment (which, however, cannot be a long-term solution).[15]

(b) In the given economic mechanism (i.e. because of basically inner conditions and not in consequence of impact of sharpening world market competition, depression and protectionism otherwise really harmful to Hungary) the export capacity of the Hungarian economy cannot be considerably increased. This leads instinctively to development projects giving preference to import substitution independently of intentions of economic policy (that is, after all, justified by the bottleneck character of import and the limited purchasing possibility of primary energy and raw material against rouble).

(c) The losses suffered are also significant in the CMEA market – not only in the form of deterioration in the terms of trade, but also in the "hardening" of the export commodity funds of Hungary – and this will not change in the future, either.

(d) Despite progressive intentions of the 1979/80 modifications in price mechanism and regulators operative alterations of regulators can not be avoided, nor can a series of measures drawing away excessive incomes, thus the gap between strategic intentions connected with the regulation and the practice of the functioning of regulators will widen.

(e) Circumstances are changing also in other respects. Until the mid-1970s a safe commodity supply with permanently widening assortment could be maintained in Hungary with a hardly changing consumer price level. Regrouping of labour initiated by enterprises took place very rarely, while that initiated by the Government almost not at all. This way the "right" not only to work, but to the job was enforced. Benefits and price subsidies previously developed were maintained also if their topicality had already ceased. Apart from some professions and trades it was not difficult to find employment anywhere. Apart from effects of demographical factors, real incomes attained were guaranteed even for each individual. Chances to get a flat had continuously improved until the mid-1970s. All this resulted in a kind of security feeling, independently of whether they could be qualified rational or not from socio-political and economic viewpoints. Developments of the late 1970s and early 1980s necessarily eliminate the background of this feeling of security.

However, from the permanently unfavourable economic situation it does not follow that the scope of economic policy would be narrowed down to a minimum (though this conclusion is usually drawn as self-evident). Apart from some product groups Hungary has only a marginal role on the world market, which does not exclude an export-oriented development even despite depression. The small size of the economy is not only a disadvantage, but also an advantage. Examples of successful reaction to world economic changes observed up to now were of national economic and offensive character. Possibilities of movement in such direction are only increased by the fact that also CMEA-countries – at least in the short run – have to look for individual solutions in order to ensure their foreign trade equilibrium and, as a tool for this, to improve their export competitiveness. Therefore, the possibility of a successful export-oriented economic policy is given in principle, though, of course, rapid results to be achieved within one or two years may not be reckoned with.

What freedom of movement and manoeuvring possibility the economic policy will have directly depends on the efficiency of Hungary's foreign trade. This latter, however, depends first of all on an adequate economic mechanism that may basically influence the efficiency of technological transfer, the success of our cooperation ventures and the adaptivity of our economy, in general.

Anyway, we should be aware that with the time passing it will be more and more difficult to initiate radical changes in the economic mechanism. Namely, the reform

[15] In this regard earlier I held an opinion divergent from those of Rezső *Nyers* and Márton *Tardos* [17]. Now, I have to admit on the basis of latest experience that I was wrong. Strict regulation of the purchasing power, though resulting in some qualitative changes as regards partial processes, did not bring about such changes concerning the entire development process (not even in an initial form).

strongly requires social stability and an atmosphere of initiatives and optimism among enterprise managers. The survival of present processes may attack preconditions of further progress precisely at these vulnerable points. As to experiences from the past we have to reckon with it also in the future that if we try to widen decision-making possibilities with unchanged institutional and organizational structure and systems of relationships – e.g. by loosening restrictions concerning the sphere of activity of enterprises, stimulating auxiliary activities, etc. – then this might lead, in the structure oriented towards stability, not to a natural selection of more rational alternatives, but to the system becoming more rigid to the building up of protective mechanisms blocking up new ways, for which several examples may be mentioned precisely from Hungarian experience. (Opposition against more elastic small organizations being in an undoubtedly more advantageous situation because of their looser dependence on control agencies, but having a more uncertain existence is increasing and under certain circumstances this may have a paralysing effect.) This is a factor that has to be reckoned with also in the future in case of making progress by small steps. Therefore, conditions are ripe for deciding on far-reaching changes again, simultaneously at several points of the system of economic control and management, on the further development of the reform started in 1968.

Concepts about the further development of the reform have already long been developed in rough outlines – as it had happened also previously. Significant steps in this direction have recently been taken in Hungary by increasing the role of small ventures, by changing the system of industrial control, by the revision of big organizations, etc. Whether this process will develop after all or not depends not only – probably not even primarily – on the existence of properly detailed proposals, but on whether governing bodies and social groups directly interested in the further development of the reform process – i.e. not only through the transmission that "things would be then better, in general" –, can be convinced of the necessity of such a change (and of the disadvantages of not doing so, respectively).

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ИСТОРИЧЕСКИЙ ПУТЬ РАЗВИТИЯ УПРАВЛЕНИЯ ВЕНГЕРСКОЙ ЭКОНОМИКОЙ

Л. АНТАЛ

Традиционная система директивно-планового управления экономикой, в чистой форме функционировавшая в Венгрии только в первой половине 50-х годов, хотя, как показывает опыт, отнюдь и не обеспечивает полной реализации централизованных устремлений, тем не менее становится отправной точкой таких бурных общественно-экономических сдвигов, которые посредством самодвижения, при действии рыночных механизмов или вообще не имели бы места или развертывались бы значительно медленнее (рост нормы накопления, перегруппировка рабочей силы в промышленности, повышение уровня занятости и т. д.). В то же время она привела, в первую очередь, в области жизненного уровня населения к резким спадам, к большой растрате ресурсов и искажению общественных связей, норм человеческого поведения.

Уже в 1953 г. в Венгрии было разработано предложение о коренной реформе экономического механизма, однако его рассмотрения по существу не произошло в тогдашних условиях борьбы за власть. В 1957 г. по поручению правительства была образована Экономическая комиссия, которая вновь поставила на повестку дня вопрос о реформе. Из дискуссий, происходивших место в Комиссии, явствует, что хотя преобладающая часть участников и осознавала серьезные недостатки системы директивного планирования, все же сторонники реформы оказались в меньшинстве. Согласно аргументации ее противников, всеобъемлющая и радикальная реформа, существенно увеличивающая самостоятельность предприятий и роль рынка, может быть проведена лишь в отдаленном

будущем, в уравновешенных условиях, а до тех пор следует идти вперед малыми, постепенно реализующими шагами, сохраняя директивную систему планирования, но делая ее более гибкой. Такие доводы высказывались и в последствии против любых предложений реформы, независимо от конкретной хозяйственной ситуации. В конечном итоге предложения по проведению реформы в 1957 г. положили под сукно. Был реализован другой путь консолидации, когда совершенствование системы народнохозяйственного управления воплощалось в практике малых шагов. Система плановых директив стала менее жесткой, сократилось число обязательных показателей плана, возросла роль цен и всякого рода экономических стимулов, несколько расширились и возможности предприятий в принятии решений. В то же время в этот период (в первую очередь, в 1962—1964 гг.) венгерские предприятия были слиты в огромные предприятия, что во многих отношениях оказалось препятствием дальнейшему развитию и вплоть по наших дней мешает действенному функционированию рынка.

ЦК Венгерской социалистической рабочей партии под влиянием, в первую очередь, экономических затруднений, одновременно возникших во всех социалистических странах, выступил в 1965 г. с инициативой проведения реформы хозяйственного механизма, которая была осуществлена в 1968 г. Реформа проводилась в противоречивых условиях: сохранилась система институтов управления экономикой, отражающая логику ранее осуществовавшей системы управления; сохранились искусственно объединенные предприятия; наконец, остались неизмененные управленческие кадры. Все это в совокупности означало, что остались нетронутыми сложные отношения зависимости от руководящих органов, личные связи, пронизывающие всю экономику. Так сложилось странное положение, когда обязательные плановые директивы были отменены, но о функционировании подлинного рынка говорить не приходилось. Данная система управления правит посредством формально неконтролируемых «запросов» сверху, вместо разбивки планов — «спусканием» экономических рычагов цен. Противоречивые условия реформы заведомо были чреваты возможностью и даже необходимостью попятного движения, что произошло в течение весьма короткого времени (уже в начале 70-х годов). Этот процесс произошел независимо от неблагоприятных изменений в мировой экономике, хотя не представляет сомнения, что «взрыв цен» и значительные потери Венгрии в условиях торговли ускорили этот процесс.

В конце 70-х годов вновь усилились затруднения венгерского народного хозяйства. Много признаков свидетельствует о том, что изменения, инициатором которых выступило правительство — в первую очередь, объединение отраслевых промышленных министерств, введение системы цен, отражающей движения мирового рынка, расширение возможностей мелкого предпринимательства — действуют в положительном направлении, однако они не являются достаточными. Реформу следует продолжать.

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CHANGES IN THE MACRO-STRUCTURE OF THE HUNGARIAN ECONOMY (1950–2000)*

My preceding article [1] was concerned with the rate of economic growth. It was pointed out that one of the decisive factors in the formation of the growth rate, the *macro-economic capital/output ratio* is not an efficiency indicator, naturally its level is influenced by the micro-level efficiency of the utilization of fixed capital, however, its *long range, secular trend* – and with this also that of the growth rate – depends primarily on the changes in the *macro-structure.* In the present article, among others, I would like to prove this statement. This article is a continuation of the preceding one as much as I am going to refer to its data and statements as already known. By macro-structure the *distribution of fixed capital stock, output and employment by main branches* is meant throughout the article.

The method of investigation

The development of the capital structure and the macro-economic capital/output ratio, the employment structure and the macro-economic productivity can be analysed by identical methods. Therefore, in the following description of the method such neutral terms are used which can be applied to both cases:

stock: capital stock or the stock of labour force employed;

per unit indicator: capital/output ratio or labour requirement per unit of output (the reciprocal of labour productivity).

There are *I* branches in the economy. They can be divided into two groups: the first group consists of I^n branches and the other one of I^m branches ($I^n + I^m = I$). Let us apply the following symbols:

c_t^i *stock,* g_t^i *output,*

$$\alpha_t^i = \frac{c_t^i}{g_t^i} \text{ per unit indicator } \omega_t^i = \frac{1}{\alpha_t^i} \text{ reciprocal per unit indicator}$$

in branch i ($i = 1, \ldots, I$), in period t.

*The article is based on the second part of a study by the Department of Macroeconomic Models in the National Planning Office under the title: "Growth and macro-structure 1950–2000". Magda *Ács,* Ferenc *Bánhidi,* György *Boda,* Tivadar *Faur,* Katalin *Haraszti,* Mrs. *Krekó,* János *Réti,* and László *Szabó* participated in compiling the material. The author alone is responsible for the conclusions as formulated.

The same symbols without uper index denote the corresponding indicators of the national economy as a whole, naturally

$$c_t = \sum_i c_t^i \quad \text{and} \quad g_t = \sum_i g_t^i . \qquad (i = 1,I)$$

Finally, in order to simplify the description of the structure we introduce the following *share indicators:*

$$\hat{c}_t^i = \frac{c_t^i}{c_t} \qquad \hat{g}_t^i = \frac{g_t^i}{g_t} \qquad (i = 1,I)$$

We are looking for simple, practical methods to answer the following three questions.

1. *What is the rate of structural change in the stock over a given period?* Let us define the indicator *of changes in the shares by branches* for the period consisting of K sub-periods after the t-th period:

$$\varphi_{t,K}^i = \frac{\dfrac{c_{t+K}^i - c_t^i}{c_{t+K} - c_t}}{\hat{c}_t^i} . \qquad (i = 1,I)\ (1.a)$$

The indicator $\varphi_{t,K}^i$ is a ratio of the shares in the *increment* and in the *starting* stock for the i-th branch. In case of a constant structure the value of the indicator is precisely unity, therefore the average deviation from unity can be regarded as a good measure of the *macro-economic structural change* taking place in the *stock:*

$$\varphi_{t,K}^i = \frac{\sum_i (\varphi_{t,K} - 1)}{I} \qquad (i = 1,I)\ (1.b)$$

2. *How do the branch-level per unit indicators or their changes depend on the structure or on the changes in the structure?* The answer follows directly from the definition of the per unit indicator α_t, since

$$\alpha_t^i = \frac{c_t^i}{g_t^i} = \frac{\dfrac{c_t^i}{c_t^i}\, c_t}{\dfrac{g_t^i}{g_t}\, g_t} = \frac{\hat{c}_t^i}{\hat{g}_t^i}\, \frac{c_t}{g_t} . \qquad (i = 1,I)\ (2.a)$$

i. e.

$$\alpha_t^i = \frac{\hat{c}_t^i}{\hat{g}_t^i} \alpha_t , \tag{2.b}$$

and thus

$$\frac{\alpha_{t+k}^i}{\alpha_t^i} = \frac{\hat{c}_{t+k}^i}{\hat{c}_t^i} \frac{\hat{g}_t^i}{\hat{g}_{t+K}^i} \frac{\alpha_{t+K}}{\alpha_t} \tag{2.c}$$

Consequently, the branch-level per unit indicators deviate from the average, macro-level one by the ratio of their shares in the stock and in the output. It also follows that the greater the deviation between the structure of the stock and of the output or between their changes, the more the branch-level per unit indicators deviate from the average or their changes from the average change.

3. To what extent can changes in the average, macr-economic per unit indicators over a given period of time be attributed to changes in the structure of the stock and to what extent to changes in the branch-level per unit indicators and that in the two main group of branches taken separately?

It is a well known difficulty with such break-downs that the result depends on the order of operations: which factor is changed first and to which one is the "residual" effect attributed to. In other words: the result attributable to structural changes depends on whether the effect is measured by the per unit indicators of the base period or by those of the closing one; similarly, the result obtained for the effect of changes in the branch-level per unit indicators depends on whether it is measured on the structure of the base period or on that of the closing one. This deviation of results is interesting for the index theory, but it is inconvenient for practical analysis. Therefore, the break-down is made unambiguous so that every possible measurement is performed and the geometric mean of the results obtained is taken as a measure of changes in structure and in the per unit indicators.

It follows from the definitions of the per unit indicator, the reciprocal of the per unit indicator and of the share indicator that

$$g_t = \sum_i c_t^i \omega_t^i = c_t \sum_i \hat{c}_t^i \omega_t^i \tag{3.a}$$

$$\omega_t = \frac{g_t}{c_t} = \sum_i \hat{c}_t^i \omega_t^i \qquad (i=1,I) \tag{3.b}$$

$$\frac{\alpha_{t+K}}{\alpha_t} = \frac{\omega_t}{\omega_{t+K}} . \tag{3.c}$$

The equation (3.c) expresses the base index of the macro-economic per unit indicator by the help of the reciprocal of the per unit indicator; and the equation (3.b) shows that the reciprocal of the macro-economic per unit indicator can be expressed as a combination of the share indicators and the reciprocals of the branch-level per unit indicators. In order to have a break-down of the total change into contributing factors we are going to define here such *fictitious combinations* which would describe the reciprocal of the macro-economic per unit indicator if only one (or only two) factors changed and the other two (or a third one) remained unchanged:

$\omega^{S}_{t,K} = \sum_{i} \hat{c}^{i}_{t+k} \omega^{i}_{t}$ — changes in the structure only,

$\omega^{N}_{t,K} = \sum_{i} \hat{c}^{n}_{t} \omega^{n}_{t+K} + \sum_{m} \hat{c}^{m}_{t} \omega^{m}_{t}$ — changes in the per unit indicators of group *n* only,

$\omega^{M}_{t,K} = \sum_{n} \hat{c}^{n} \omega^{n}_{t} + \sum_{m} \hat{c}^{m}_{t} \omega^{m}_{t+K}$ — changes in the per unit indicators of group *m* only,

$\omega^{S,N}_{t,K} = \sum_{n} \hat{c}^{n}_{t+K} \omega^{n}_{t+K} + \sum_{m} \hat{c}^{m}_{t+K} \omega^{m}_{t}$ — changes in the structure and in the per unit indicators of group *n* only,

$\omega^{S,M}_{t,K} = \sum_{n} \hat{c}^{n}_{t+K} \omega^{n}_{t} + \sum_{m} \hat{c}^{m}_{t+K} \omega^{m}_{t+K}$ — changes in the structure and in the per unit indicators of group *m* only,

$\omega^{F}_{t,K} = \sum_{i} \hat{c}^{i}_{t} \omega^{i}_{t+K}$ — changes in the per unit indicators of both groups,

meanwhile the rest of the factors are unchanged.

$$(i = 1,I; n = 1,I^{n}; m = 1,I^{m}).$$

Let us consider first the effects of changes in structure and in the per unit indicators of the two groups. They can be measured in two ways; as a measure of the effect the geometric mean of the two measurements is accepted:

$$S_{t,K} = \sqrt{\frac{\omega_{t}}{\omega^{S}_{t,K}} \frac{\omega_{t,K}}{\omega_{t+K}}}$$ — the effect of structural change (3.d)

$$F_{t,K} = \sqrt{\frac{\omega_{t}}{\omega^{Ft,K}} \frac{\omega^{S}_{t,K}}{\omega_{t+K}}}$$ — the effect of changes in the per unit indicators (3.e)

By the help of equation (3.c) it is easy to prove that

$$\frac{\alpha_{t+K}}{\alpha_t} = S_{t,K}\, F_{t,K} \tag{3.f}$$

i.e. the change in the index of macro-economic per unit indicator has been unambiguously broken down into a product of two factors: the effects of change in structure and in the per unit indicators.

Let us consider the effect of changes in the per unit indicators in one group of branches separately. This can be measured in four ways: per unit indicators change "first" in one of the groups, "then" in the other or conversely; further in both cases they are weighted with the base and the closing structures. Again the geometric means are taken as measures of the average, macro-economic effect per unit indicator of changes in the per unit indicators

$$N_{t,K} = \sqrt[4]{\frac{\omega_t}{\omega^N_{t,K}} \frac{\omega^M_{t,K}}{\omega^F_{t,K}} \frac{\omega^S_{t,K}}{\omega^{S,N}_{t,K}} \frac{\omega^{S,M}_{t,K}}{\omega_{t+K}}} \qquad \text{in group } n \tag{3.g}$$

$$M_{t,K} = \sqrt[4]{\frac{\omega_t}{\omega^M_{t,K}} \frac{\omega^N_{t,K}}{\omega^F_{t,K}} \frac{\omega^S_{t,K}}{\omega^{S,M}_{t,K}} \frac{\omega^{S,N}_{t,K}}{\omega_{t+K}}} \qquad \text{in group } m \tag{3.h}$$

Considering equation (3.e) it can be proved again

$$F_{t,K} = N_{t,K} M_{t,K} \tag{3.i}$$

i.e. the measure of changes in the per unit indicators has been unambiguously broken into a product of two factors – the effect attributable to changes in group n and to changes in group m.

It is an advantage of the product formula that in case $K > 1$ i.e. if periods consist of several years, the components of *the average annual changes*, in other words the *average annual effects* of the individual factors can easily be given in the same form:

$$\sqrt[K]{\frac{\alpha_{t+K}}{\alpha_t}} = \sqrt[K]{S_{t,K}}\ \sqrt[K]{N_{t,K}}\ \sqrt[K]{M_{t,K}}\,. \tag{3.j}$$

In the course of the analysis the quantified answer to the third question will be given in such a form.

It is striking that in the answers given to the second and third questions there seems to be a certain circularity. Changes in the branch-level per unit indicators are traced back to the structure and the macro-economic per unit indicator; changes in the macro-economic per unit indicator to the structure and the branch-level per unit indicators. This is no mistake but a two-way approach to the same relationship. These factors *mutually* determine one another; which of them is the cause and which is the result, cannot be decided with methodological instruments. In the course of the analysis, depending on the economic appraisal of the concrete events of concrete periods, different sides will be emphasized.

The data

The economy is divided into five main branches:

1. industry,
2. construction,
3. agriculture and forestry
4. productive services,
5. non material services.

Branches 1–3 are classified into a more aggregate group called *material branches,* branches 4–5 into *service branches;* this latter is often referred to as infrastructural branches or, in brief, *infrastructure.*

Capital in the main branches is represented by time series of *fixed capital stock* at the beginning of the year and employment by the number of *active earners* at the beginning of the year, and output by the *value added.* (This latter was corrected, where necessary, so that the sum of value added in the main branches be always identical with the value of the GDP.)

In respect of comparable prices and classifications applied the available time series are given for the following periods:

1950–1960: at 1968 prices, economic units classified by activity performed;
1960–1970: at 1968 prices, economic units classified by organization;
1970–1980: at 1976 prices, economic units classified by organization;
1980–2000: at expected 1980 prices, economic units classified by organization.

For the majority of computations described here it was not necessary to convert data into new prices since we are operating here with indicators of *change* – figure without dimension i.e. unit of measurement – as described by the methodology in the preceding part. Naturally they have always been determined on the basis of those sections of the time series which are *homogeneous* in respect of price and classification. If necessary, we reach beyond the period boundaries, by linking together base indexes, for example indicators for the period 1958–68 were obtained by linking the index numbers for 1958–60 and 1960–68. (This method is not applicable to the indicators of structural change $\varphi_{t,K}$, therefore they are only given for periods corresponding to the individual sections of the time series.) Quoting side by side – or even linking together – indicators which had been measured on different sections of the time series naturally neglects the

fact that if they were measured at different prices or by different classifications perhaps the rate of change would also be different.

Indicators of structural change computed in this manner are presented in *Tables 1* and *4*. the break-down of changes in the macro-economic per unit indicator into factors is contained in *Tables 2* and *4*.

In the article we have also used other data which are not independent of the price system. They have been computed from time series made homogeneous as described in the author's preceding article.

The structure of fixed capital and the capital/output ratio

The take-off in the early 1950s was set into motion by the transformation of the *investment structure* and its *radical diversion* from the initial distribution of the fixed capital stock. The investment structure itself did not change much afterwards, but the initial diversion was of such magnitude that its "shock waves" reach over to the present day. As a consequence of the high rate of accumulation the distribution of the capital stock was changing rapidly, naturally following the direction of accumulation, adjusting itself to it, but there are still perceviable differences between the two structures. Therefore, *the process of accumulation keeps the structure of fixed capital in permanent motion even today.* Meanwile investments are allocated from five year to five year in relatively constant, almost traditional proportions, the shares of individual branches of the economy in the fixed capital stock are still changing constantly.

According to the data of *Table 1* the restructuring took place basically *from the infrastructure towards material production.* As against the initial 80:20 distribution of the fixed capital stock between services and the branches of material production, in 1978 it was already 60 : 40, whereas their shares in the increment were 50–50 per cent. The intensity of restructuring diminished from decade to decade not because the investment structure was changing but rather because the distribution of the stock was approaching that of the increment.

The size and significance of this restructuring can be illustrated by comparing the actual, realized accumulation with the computed, proportional accumulation (see *Table 5*).

Naturally, "proportional" accumulation is only a fiction: without restructuring the growth of the fixed capital stock could not have been 3.4-fold but much smaller. As an illustration of the restructuring and growth that have taken place, it might be stated, however, that almost 60 per cent of accumulation necessary for *industrialization and the creation of large-scale farming* was ensured by the *postponement* of proportional development of the *infrastructural fixed capital stock.* *

*A restructuring of this *magnitude* was permitted by the fact that pre-war Hungary had a relatively developed infrastructure as compared to her general development level and thus in the 1950s there were apparently infrastructural capacity reserves.

Table 1

Restructing of the fixed capital stock, 1950–1978

	Opening stock				Increment			Intensity of restructuring*		
	1950	1960	1970	1978	1950–60	1960–70	1970–78	1950–60	1960–70	1970–78
	1	2	3	4	5	6	7	5/1	6/2	7/3
Industry	12.9	19.0	22.0	25.7	39.6	35.7	31.8	3.07	1.88	1.44
Construction	0.2	0.5	0.9	1.5	1.5	1.9	2.7	7.50	3.80	1.67
Agriculture	7.1	7.8	10.8	12.3	9.9	12.8	15.0	1.39	1.61	1.39
Material production, total	20.2	27.3	33.7	39.5	51.1	50.4	49.5	2.53	1.81	1.47
Productive services	30.7	26.5	26.4	24.0	17.8	18.1	20.0	0.58	0.68	0.76
Non-material services	49.1	46.2	39.9	36.5	31.1	31.5	30.5	0.63	0.68	0.76
Services total	79.8	72.7	66.3	60.5	48.9	49.6	50.5	0.61	0.68	0.76
National economy, total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	1.95	0.99	0.40

*$\varphi^{i}_{t,K}$ or, in the last row $\varphi_{t,K}$.

The surplus accumulation flowing into the material production in the 1950s served basically *industrialization:* the industry, accounting for 13 per cent of the initial fixed capital stock, received 40 per cent of the increment over the ten years. It can be seen from the data of *Table 1* that in the 1960s the restructuring through accumulation was operating – though with an already diminishing intensity – energetically also in favour of

Table 2

Factors of changes in the macro-economic capital/output ratio

Years	Average annual percentual change in the macro-economic capital/output ratio due to changes				
	in the per unit indicators of			in the branch structure	Total
	material branches	service branches	total		
	1	2	3	4	5
1950–1958	+2.74	–1.62	+1.08	–2.75	–1.70
1958–1968	+0.69	–0.63	+0.06	–1.47	–1.38
1968–1970	+2.67	–1.36	+1.22	–2.02	–0.81
1970–1975	+1.65	–0.61	+1.03	–1.53	–0.51
1950–1975	+1.69	–1.01	+0.67	–1.94	–1.28
1975–1978	+1.70	+0.07	+1.73	–0.86	+0.86
1978–1981	+3.34	+0.97	+4.34	–0.78	+3.52
1981–1985	+0.66	+0.23	+0.90	0.00	+0.90
1978–1985	+1.80	+0.55	+2.36	–0.34	+2.01
MAXIMOST*					
1985–1990	+0.40	+0.14	+0.54	+0.07	+0.61
1990–1995	+0.34	+0.69	+1.06	+0.23	+1.28
1995–2000	+0.39	+0.63	+1.06	+0.23	+1.28
1985–2000	+0.38	+0.50	+0.88	+0.18	+1.06

$1 = 100\ (N_{t,K} - 1)$

$2 = 100\ (M_{t,K} - 1)$

$3 = 100\ (F_{t,K} - 1)$

$4 = 100\ (S_{t,K} - 1)$

$5 = 100\ (\frac{\alpha_{t+K}}{\alpha_t} - 1)$

*Denomination of one of the growth variants presented in the preceding article. In this respect there is no essential difference among the variants.

Table 3

The restructuring of non-agricultural employment, 1950–1975

	Opening stock				Increment			The intensity of restructuring*		
	1950	1960	1970	1975	1950–60	1960–70	1970–75	1950–60	1960–70	1970–75
	1	2	3	4	5	6	7	5 /1	6 /2	7 /3
Industry	39.1	46.4	47.8	45.2	61.8	53.8	10.0	1.58	1.16	0.21
Construction	9.2	9.2	9.6	10.4	13.3	11.8	20.7	1.45	1.28	2.16
Total	48.3	55.6	57.4	55.6	75.1	65.6	30.7	1.55	1.18	0.53
Productive services	19.1	21.2	21.9	22.9	23.1	24.8	36.2	1.21	1.17	1.65
Non-material services	32.6	23.2	20.7	21.5	1.8	9.6	33.1	0.06	0.41	1.60
Services total	51.7	44.4	42.6	44.4	24.9	34.4	69.3	0.48	0.77	1.63
Non-agricultural employment, total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.55	0.30	0.80

* $\phi^{i}_{t,K}$ or, in the last row $\varphi_{t,K}$.

Table 4

Factors of changes in the macro-economic productivity

Years	Average annual percentual change due to changes				
	in the per unit indicators of			in the branch structure	Total
	material branches	service branches	total		
	1	2	3	4	5
1950–1958	1.48	1.85	3.36	0.63	4.02
1958–1968	3.64	0.71	4.39	0.68	5.30
1968–1970	1.85	1.16	3.03	0.45	3.48
1970–1975	4.34	1.30	5.70	0.11	5.81
1950–1975	2.94	1.31	4.29	0.53	4.84
1975–1978	4.29	1.06	5.40	–0.07	5.32
1978–1981	2.45	0.31	2.76	–0.25	2.50
1981–1985	3.27	0.82	4.11	–0.14	3.96

$1 = 100\ (N_{t,K} - 1)$

$2 = 100\ (M_{t,K} - 1)$

$3 = 100\ (F_{t,K} - 1)$

$4 = 100\ (S_{t,K} - 1)$

$5 = 100\ (\frac{\alpha_{t+k}}{\alpha_t} - 1)$

the *agriculture* and in the 1970s the position of the industry and agriculture became practically *identical* in this respect.

The structural change which diverted accumulation from high capital intensity infrastructure towards the significantly less capital intensive material production, naturally *diminished the macro-economic capital/output ratio.* It can be seen from *Table 2* that this effect by itself would have justified an annual decline of 2 per cent in the macro-economic capital/output ratio between 1950 and 1975 – more than what actually took place.

Beyond this direct effect, the development of the branch-level capital/output ratios also reflects the indirect influence of structural change, or more precisely the fact that the distribution of output by main branches has followed only partly the changes in the fixed capital stock.

The additional accumulation in the *industry* resulted basically in a proportional expansion of *output;* the average capital intensity of the industry changed but slightly up

Table 5
Structural rearrangement of the stock of fixed capital between 1950–1978

	Material production	Infrastructure	Total
Index number of the growth rate of stock 1978/1950			
Actual	7.7	2.5	3.4
Proportional	3.4	3.4	3.4
Increment of the stock 1950–1978*			
Actual	870	920	1790
Proportional	360	1430	1790
Difference	+510	–510	

*At 1976 prices, billion Ft

to the early 1970s. However, the creation of large-scale production organizations in *construction and the agriculture* multiplied the initially extremely low capital intensity. This levelling process of capital intensity came to an important turning point in the mid-1970s: in 1975 *the capital intensity of the agriculture reached the average of the industry.**

The growth of the average capital intensity in material production was retarded for long by comparative advantages originating from *foreign trade.* The export required more live labour and less fixed capital input (per unit) than the hypothetical product basket which would have been produced in a branch pattern corresponding to the structure of import. Consequently, through foreign trade saved relatively scarce capital in exchange for additional inputs of relatively abundant live labour (see *Table 6*).

There was a declining trend in the development of capital saving per unit of output and from mid-1970s it changed direction: nowadays the export is more capital intensive than the import. One of the reasons for this is that the capital intensity of agriculture, accounting for a considerable share in exports, exceeds that of the industry. Another reason is that changes in relative prices reduced the capital intensity of fuels which constitute a large share of imports. The assessment and numerical analysis of the future consequences of this important change is a task to be solved in the future. (Computations performed with multisectoral models in the framework of elaborating the

*In most advanced industrial countries the capital/output ratio of agriculture is higher than that of industry, frequently by 1.5–2.5 times. The capital intensity of agriculture was increasing faster than that of industry in every CMEA country: in general it caught up with the level of industry between 1970 and 1975 (in Czechoslovakia between 1960 and 1965, in Bulgaria between 1975 and 1978).

Table 6
Changes in the capital intensity of exports and imports between 1960 and 1978

	Fixed capital per unit of		Difference (import minus export)
	exports	imports	
1960 (at 1968 prices)	3.62	3.80	0.18
1970 (at 1968 prices)	3.51	3.60	0.09
1975 (at 1976 prices)	3.49	3.50	–0.01
1978 (at 1976 prices)	3.52	3.49	–0.03

6th five-year plan for the period 1981–1985, indicate that through favourable transformation of the foreign trade pattern this trend can be reversed by 1990; nevertheless foreign trade continues to be advantageous also in this respect if import substitutes for such output the capital intensity of which exceeds the average of exports.)

Despite the retarding effect of the comparative advantages the average capital intensity of material production was increasing rapidly; in other words the growth rate of material production lagged behind that of the fixed capital stock. It can be seen in *Table 2* that between 1950–1975 this factor – i.e. changes in the per unit indicators of the material branches – would have caused on average a 1.7 per cent annual *increase* in the macro-economic capital/output ratio.

In the infrastructure an opposite process took place. The volume of *services rendered* was increasing in the decades 1950s and 1960s *faster* than material production; in the 1970s these two were practically identical.

As a consequence of the slow growth of the fixed capital stock and the rapid increase of the volume of services rendered, *the per unit capital stock tied up in services* declined to less than half over twenty-five years. The quality consequences of this – overburdened transport, trade, education and public health networks, underdeveloped telecommunication – are well known in the everyday's life in Hungary.

This indirect effect of the structural transformation, i.e. the steep decline of the capital/output ratio in the infrastructure was the balancing item, the determinant in the development of the average macro-economic capital/output ratio. As long as this effect amplified the direct decreasing effect of structural changes, the *macro-economic capital/output ratio was declining,* despite a rising capital intensity in material production.

However, by the middle of the 1970s the opportunities of the ever more intensive exploitation of the fixed capital stock in the infrastructure were exhausted. With this another, a more comprehensive turn took place also in the development of the capital/output ratios of the main branches: after a continuous decline over twenty five years, the capital/output ratio of services hit the bottom in 1975 and *turned into a rise.* This was enough to make also the average macro-economic capital/output ratio to reverse its trend and to start rising.

Declining capital/output ratio in services as a source of growth originating from structural changes, broke down before the accumulation restructuring from the infrastructure into the material production was completed. The share of service branches in the fixed capital stock continued to decline in the late 1970s; the growth of services rendered could keep pace with material production only because the growth of the latter was slowed down due to a sudden drop of the growth rate at the end of the decade. This was, however, only a temporary phenomenon; in the future *we have to reckon with the structural consequences of the reversal in the trend of the capital/output ratio in the services.*

If the investment structure is kept rigid also in the future and preserves a 50 per cent share of the service branches in the increment of the fixed capital stock, then their share in the fixed capital stock continues to decline as long as it reaches 50 per cent. With rising capital/output ratio this means that the volume of services rendered cannot follow material production any longer; in the future not only the quality level but also the lagging growth of the volume of services will more and more become a bottleneck hindering development. Functional disorders originating from this retard the growth of material production, reduce capacity utilization and thus increase the capital intensity of material production more than necessary. Therefore, this solution cannot be long-lived. After hitting the bottom, the share of the infrastructure should change to a rapidly rising tendency.

If the investment structure established in the period of the take-off is changed relatively rapidly so as to stabilize the share of the infrastructure in the fixed capital stock and in the increment around 60 per cent, this would require that the share of the less capital intensive material production in the increment should decline over a number of years necessary to attain the desired ratio; and the relative decrease of investment in the material production would retard the growth of output in these branches.

The consequences of the latter solution can be well quantified at the level of individual branches. The consequences of the former solution appear at the micro level; material production which is not realized due to functional disturbances in services cannot be quantified and asserted in the investment bargaining. Therefore there is apparently a strong pressure towards the former solution. It is not decisive but worth considering that in the advanced countries the share of infrastructural investments exceeds 60 per cent and is further increasing (see *Table 7*).

In the 6th five-year plan essentially the latter solution was adopted. It envisages to *stop between 1981 and 1985 the declining share of infrastructure in the fixed capital stock* at the level of 58–59 per cent. With this the direct decreasing effect of the changing capital structure on the macro-economic capital/output ratio also ceases in the first half of the 1980s. According to our present knowledge this turning point indicating secular change should be followed by a reversal of the trend: there can be hardly any doubt that the share of the infrastructure in the fixed capital stock *will start to rise* after 1985 and this will exert raising influence on the macro-economic capital/output ratio, too. In our global estimates extending to the turn of the century we allowed for an extremely modest

Table 7
The share of infrastructural investment in total investment

Country	1970	1977
GFR	62.4	70.1
France	66.1	71.5
Italy	62.6	63.7
England	63.2	60.8
Netherlands	62.9	64.5
Belgium	63.1	70.6
Denmark	64.7	75.3
EEC	64.3	68.0

Source: Commission des Communautés Européennes: L'évolution des structures sectorielles des économies européennes depuis la crise du petrole 1973–78. Bruxelles, 1979.

rate of this growth: the share of services is estimated at 61–62 per cent by 2000. Accordingly, in our computations the structural change has a very small raising effect on the macro-economic capital/output ratio: between 1985 and 2000 it will be less than 0.2 per cent per annum. The effect of a further increase in the per unit indicators of the service branches is estimated to be similarly modest – some half per cent per annum. It remains to be clarified in the further work stages of the long-term planning exercise whether such a little change will be enough to meet economic demand and social expectations emerging in respect of services.

Nevertheless, these two factors taken together cause a 0.6–0.7 per cent annual increase in the macro-economic capital/output ratio after 1985. If capital intensity in material production were rising similarly and exerted such a raising effect – at a rate of 1.7–1.8 per cent per annum – as up to that time, the macro-economic capital/output ratio would be increasing at an annual rate of 2.3–2.4 per cent in the last 15 years of the decade and in 2000 it would exceed the level of 1950 by 20–22 per cent. This would practically block economic growth. If, on the other hand, it were required that the macro-economic capital/output ratio should not change after 1985 but should remain constant – the capital intensity in material production would have to decrease considerably instead of growing. This assumption would amount to such optimism which is not supported by our present information.

The global working hypothesis has been adopted – for the calculation of the growth variants described in the preceding article – between these two apparently impossible extremes according to which the macro-economic capital/output ratio will be increasing exactly at the same rate in the last quarter of the century at which it was decreasing in the preceding one. This implies for the period after 1985 less than 1.1 per

cent annual growth and the assumption that the raising effect of the per unit indicators in material production on the macro-economic capital/output ratio will decline below 0.4 per cent per annum. Thus our global working hypothesis reckons with a considerable turn in the development of the efficiency of material production. Consequently it would be illusory to hope that improving efficiency can reverse the rising trend of the macro-economic capital/output ratio; the improvement is indispensable to ensure that the rising trend owing to macro-structural causes be of relatively limited magnitude.

Employment pattern and productivity

Over the quarter of century of the take-off *the number of active earners* increased by almost a million, by round 23 per cent. 73 per cent of the increment fell on two periods: between 1950 and 1955 the increment was 370 thousand, between 1966 and 1970 315 thousand. The average increment for these years was 74–78 thousand and for the remaining years of the period 15 thousand. It can be seen from this that the expansion of employment was not determined by the demand for labour of the gradually growing production but by the *labour supply:* at first it was the need to eliminate the hidden unemployment of the previous economy, then the pressure exerted by juvenile labour force grown up in the demographic wave.

The rapid growth of production permitted, beyond the absorption of labour supply, a relatively rapid average increase of *macro-economic productivity;* on the average of the twenty-five years at *4.8 per cent* per annum. The source of the present problems of productivity and efficiency are not to be found in the full employment achieved but in the development of the *employment pattern.*

The number of *agricultural active earners* decreased by round one million, their share declining from 50 per cent in 1950 to 20 per cent in 1978. Despite changes which occurred in the direction characteristic of the take-off period and which were rather rapid in the societal sense, the share of agricultural employment is still rather high as compared to the general development level of our economy (see *Table 8*).

Thus the number of active earners employed *outside of agriculture* increased over the twenty-five year period by two millions, nearly two fold. There have been serious mistakes committed by employment policy in the pattern of use of this vast human resource.

According to *Table 3* the increase of non-agricultural employment diverted the new labour force from the proportional development of services – primarily of non-material services – to an extent even greater than in the case of the increment of capital. In the 1950s 62 per cent in the 1960s 54 per cent of the increment in employment flowed into the *industry;* the service branches accounted for 30 per cent of the increment over the twenty-year period. Such a share seldom occurs even among the socialist countries (see *Table 9*).

Table 8
*Agricultural employment as percentage of total employment**

Country	Year	Percentage
Hungary	1978	20.3
United States	1977	3.6
German Federal Republic	1978	6.2
France	1978	8.6
Denmark	1978	8.3
Austria	1975	12.5
Italy	1978	14.2

Source: ILO Yearbooks, except for Hungary

Table 9
Percentage distribution of the increment of non-agricultural employment, 1960–1970

Country	Industry and Construction	Services
Hungary	65.5	34.5
GDR	37.7	62.3
Czechoslovakia	40.7	59.3
Soviet Union	46.4	53.6
Poland	55.3	44.7
Bulgaria	59.8	40.2
Romania	65.9	34.1

Source: ILO and CMEA Yearbooks.

With this by the early 1970s *a stirkingly distorted employment pattern* had come about even in international comparison. Simultaneously with *high shares of agricultural and non-agricultural* employment only 31 per cent of active earners were employed in the service branches and even after a significant improvement this share was still 37 per cent in 1978.

Naturally, the change in the employment patterns exerts an *increasing influence on the level of macro-economic productivity* since in the starting situation the productivity

*This indicator overestimates the share of agricultural employment. In Hungary in the agricultural organizations a significant volume of industrial and other non-agricultural activity is performed; in 1976 it accounted for 13 per cent of value added. Even if a higher share of this activity is assumed for the coming years, the share of persons engaged exclusively in agricultural production, won't be less than *17–18 per cent* which does not change the conclusion drawn from the international comparison.

Table 10
Share of persons employed in the sercive branches

Country	Years		Percentage	
Hungary	1970	1978	31.7	36.9
United States	1974	1977	63.9	65.9
GFR	1970	1978	44.5	49.9
France	1968	1978	47.8	56.2
Italy	1971	1978	41.4	50.7
Spain	1970	1978	37.7	47.8
Soviet Union	1970	1978	37.6	41.5
Czechoslovakia	1970	1978	34.7	47.5
GDR	1970	1978	35.9	37.6
Poland	1970	1978	25.7	28.0
Romania	1970	1978	18.7	22.9

Source: Cf. *Table 8*

level was the highest in the industry. However, it can be seen from *Table 4* that the direct influence of this factor on the macro-economic capital/output ratio was not so decisive as that of changes in the structure of capital. The reason for this is that the productivity levels of the individual branches differ from one another less than the capital/output ratios.

The indirect effect exerted on the productivity levels of individual main branches was more significant even as far as its magnitude is concerned. The distortion of the employment pattern led, in the first two decades, to distorted proportions also in the development of *productivity.* The low level and slow growth of productivity in the *industry* is well known in Hungary. It is less known that the growth of productivity in *construction* even lagged behind that of the industry, further that the *highest growth rate of "productivity" i.e. per capita output was attained in services* – although the material and technical conditions for this were obviously less favourable than in the material production.*

According to data in *Table 4* the growth of service "productivity" itself raised the *macro-economic productivity* by an annual rate of 1.3 per cent. Together with the direct effect arising from structural change this accounts for an annual rate of two per cent of the total 4.8 per cent annual growth of productivity; the contribution of the material production was rather modest.

In the first half of the 1970s *essential elements of a reversal* appeared also in the development of employment and productivity.

*Of the european CMEA countries it could be observed only in Bulgaria and Romania that the growth rate of productivity in the industry lagged behind the macro-economic average calculated without non-material services.

Table 11
Average annual growth rate of productivity, per cent

Country	Years	Industry	Services
Hungary	1950–70	3.5	4.7
GFR	1960–77	4.7	2.8
France	1960–77	5.6	2.9
Italy	1960–77	4.2	2.2
England	1960–77	2.8	1.6
Netherlands	1960–77	5.4	2.8
Belgium	1960–77	6.0	2.4

Source: Commission des Communautés Européennes: L'évolution des structures sectorielles des économies européennes depuis la crise du pétrole 1973–78. Bruxelles, 1979.

Possibilities of expanding the employable labour force have been temporarily exhausted – for demographic reasons again. The total number of active earners reached the upper limit in 1976 and since then it has been *declining.*

Yet it was in this period that the process of the more and more intensive utilization of labour employed in services reached its own limits. The service performance per capita was lower than in the material production for the first time in 1974 and since then it has been growing more slowly than in material production. However, the total volume of services performed has kept pace with the material production – as we have already seen it in connection with the development of the capital/output ratio. Obviously, this was possible only if there was a *simultaneous reversal of the trend in the transformation of the employment structure observed so far:* in the non-agricultural employment the rearranging influence of the increment operated between 1970 and 1975 already in favour of the infrastructure and against the industry. Moreover in 1975 the number of persons employed in the industry started *declining in absolute terms* and this process is still going on.

These structural changes affected favourably the growth of industrial productivity which rose between 1970 and 1975 as much as in the preceding ten years. It was in this five-year period for the first time that productivity grew faster in industry than in agriculture. All this confirms the conclusion that may be drawn from the opposite processes of the preceding two decades' *in the Hungarian industry productivity is not a function of the technological level or of fixed capital supply but of motives connected to employment policy.*

After 1975 there was a slowdown in the growth of production but, owing to the declining total employment and within this in the industry, the relatively favourable productivity trends continued. Naturally, as a consequence of the sudden slow-down of

the overall economic growth from 1979 on the rise of average macro-economic productivity was moderate, too. An alternative solution to this could only be a large-scale unemployment which would affect enterprise-level productivity favourably but would surely impair the social efficiency of utilizing human resources.

The size of the labour force employable by the turn of the century is determined demographically i.e. it is expected to remain on the whole constant. Consequently, if we set out from the consideration that full employment is one of the greatest and surely most attractive social achievements of existing socialism which has to be preserved at any rate, we can say that the future development of macro-economic productivity is directly dependent on the growth possibilities of production and proportional to it. As it was pointed out in the author's preceding article, this implies by all means a growth rate lower than in the past.

However, with the *somewhat slower average growth* of macro-economic productivity very significant changes should take place in its factors.

As we have seen the present *employment structure* is far from being in harmony with the general development level of the economy measured in terms of per capita output. Therefore, its future change is not characterized by a consolidation in a relatively near future, as in the case of the structure of accumulation, but by a need for *further vigorous macro-structural change of reversed direction.*

Besides, in the case of accumulation it is the allocation of the *increment* that remains a task also in the future even if this increment is going to be relatively smaller – although its total volume might be larger, than in the past. However, the size of the employable labour force can remain more or less unchanged in the forseeable future, therefore the need for structural transformation affects the present *stock,* although this change will be carried partly by the natural replacement of generations.

The required change is larger in case of the employment structure also as far as its *magnitude* is concerned. After all a favourable consolidation of the accumulation structure – preserving the present share of infrastructure in the fixed capital stock – can be carried out with 10 per cent of the total investment of a five-year plan period. However, in order to raise the percentual share of employment in the infrastructure to a level near 50 per cent – which corresponds to the figure observed in 1968 in France and around 1978 in the German Federal Republic – *some 600 thousand persons should be moved;* in 1978 this accounted for 34 per cent of industrial employment and almost for 60 per cent of agricultural employment.

At least such but probably larger changes can be expected by the turn of the century. Due to its direction this change has a direct *decreasing effect on the level of macro-economic productivity* and results at the same time in a healthy retardation of "productivity" growth of services – i.e. in improving their labour supply. If this occurs the only dynamic factor in the macro-economic productivity growth can be the *rise of productivity in the branches of material production;* moreover it is an indispensable condition for the realization of progressive transformation in the employment structure.

Summary conclusions

1. In the period of the take-off – between 1950 and the mid 1970s – the accelerating economic growth was further heated or accompanied by characteristic changes in the macro-structure. Investment and employment policy alike favoured material production; the share of infrastructure in the fixed capital stock and in the non-agricultural employment declined. However, the volume of services rendered could not lag behind material production; consequently the capital/output ratio in the infrastructure diminished at a high rate and "productivity in services was growing faster than in material production. Changes in the structure of fixed capital and employment decreased the macro-economic capital/output ratio partly directly partly through changes in the per unit indicators of the main branches, and accelerated the growth of the macro-economic productivity despite the fact that the capital/output ratio in material production was rising and productivity growth was slow. Thus changes in the macro-structure became one of the main factors, a driving force of growth.

2. In the 1970s it is possible to point out clearly those turning points which indicated that the growth potential inherent in the changes of the macro-structure had been exhausted. The more and more intensive utilization of fixed capital and labour employed in the infrastructure reached after all its limits; with this the capital/output ratio started rising in services and the "productivity" lagging – technologically justifiably – behind material production. The expansion, even the preservation of the volume of services will require in the future a reversed transformation in the structures of fixed capital and employment. In employment this has been going on since the mid-1970s; in the fixed capital stock this will be put on the agenda in the early 1980s.

3. These new tendencies – foreseeably reaching up to the turn of the century – will raise the macro-economic capital/output ratio and retard the growth of macro-economic productivity. This is the objective internal, structural cause of the slowdown in growth. It is a precondition of the healthy continuation of the growth process that the rise of the capital/output ratio in material production be moderated and productivity growth accelerated. After exhaustion of the reserves hidden in the transformation of the macro-structure it is the mobilization of reserves hidden in the micro-structure that becomes the driving force of growth. In contrast with the take-off period this is characteristic of the growth path of a mature, developed economy.

Reference

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ИЗМЕНЕНИЕ МАКРОСТРУКТУРЫ В ВЕНГРИИ (1950—2000)

М. АУГУСТИНОВИЧ

На основе анализа изменения структуры венгерского народного хозяйства автор делает следующие выводы:

В период подъема — с 1950 года до середины 1970-ых годов — экономический рост стимулировался или сопровождался характерными тенденциями изменения макроструктуры. В результате изменения структуры основных фондов и занятости или же под влиянием формирования удельных показателей народнохозяйственных отраслей сокращалась фондоемкость народного хозяйства, и ускорялся рост народнохозяйственной производительности труда вопреки тому, что в материальном производстве росла фондоемкость и медленно росла производительность труда. Таким образом, изменение макроструктуры было одним из важнейших факторов, движущих сил роста.

2. В семидесятых годах ясно отмечаются поворотные пункты, которые указывали на то, что резервы роста, кроющиеся в изменении макроструктуры, иссякли. Все более интенсивное использование инфраструктурных основных средств и рабочей силы в конце концов натолкнулось на пытствия. Увеличение объема услуг и даже поддержание их нынешнего уровня требует перемещения структуры капитала и занятости в обратном направлении.

3. Эти структурные изменения действуют в направлении повышения фондоемкости в народном хозяйстве и торможения роста народнохозяйственной производительности труда. Условием здорового продолжения процесса роста является то, чтобы в области материального производства — в качестве противодействующего фактора — росла фондоемкость производства и производительность труда. После иссякания резервов роста за счет преобразования макроструктуры движущей силой роста становится мобилизация резервов, кроющихся в микроструктуре.

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I. SCHWEITZER

SOME INTERRELATIONS BETWEEN ENTERPRISE ORGANIZATION AND THE ECONOMIC MECHANISM IN HUNGARY

I have been engaged for long in the question why in the history of socialist planned economy in Hungary the process of centrally initiated merger (amalgamation) of enterprises proved to be an almost irresistible trend right up to 1980. In the course of my investigations I have related the development of the size of the enterprise – which can hardly be characterized as a continuous uninterrupted growth since there were periods of accelerated, campaign-like development – to the system of economic control and management, the economic mechanism. Meanwhile I have come to realize that I cannot rest satisfied with the categories of *the system of directive planning and of the controlled market mechanism:* new categories of mechanism have to be introduced as a "working hypothesis". Naturally, the system of economic management corresponding to the categories constructed by myself has never existed in its pure, perfect form just like the above mentioned, already accepted two mechanism models, usually referred to as opposites, have not. However, as far as its *basic idea* is concerned, it indeed existed (or still exists). Moreover, we can even say that with its compromizing character it is much nearer to the reality of our days than the controlled market mechanism which is in general referred to as functioning. For lack of a better solution I call this "third" type of mechanism *economic control and management based on the responsibility for supply of the enterprise.*

Somewhat running ahead of my main point I would like to make it clear already at this point that I regard the economic control and management system prevailing since 1968 as a contradictory coexistence of and unequal fight between the controlled market mechanism and the mechanism based on the supply responsibility of the enterprise. Throughout this period it was the supply responsibility evolved earlier that was dominating (pushed somewhat into the background up to 1972 but almost openly afterwards). The elements of the controlled market mechanism introduced were built upon the supply responsibility but these elements could not ensure the realization and expansion of market effects in their own place precisely because the survival of earlier mechanisms prevented it.

In my present article I am going to point out that it is not a precise view that the formation of the system of economic management based on supply responsibility before the economic reform in 1968 was an *unintentional* consequence of emergency situations and smaller changes in management and regulation. There have been very many intentional elements in its formulation. One can say that the concept and even the ideology of this mechanism were outlined rather markedly at that time, even if all that was not defined as a model.

The system of directive planning and the size of an enterprise

It was already in the sixties that Hungarian economists called attention to the fact that the enterprise structure in the economy – or more precisely in the Hungarian industry – showed the symptoms of overconcentration. However, this view has become generally accepted only recently, after a number of publications has proved the adverse influence of overconcentration with indisputable arguments.[1]

In those publications in which the authors try to find the causes of enterprise amalgamations and the over-concentrated character of the enterprise structure, it is often raised that the system of directive planning, the mechanism of economic control which is based on the breaking down of plan instructions is one of the motives for the growing enterprise sizes.[2]

No doubtd there is some truth in it. In the course of shaping the socialist planned economy – at that time the system of directive planing – in fact a considerable enterprise centralization took place in the Hungarian economy and these two processes were definitely closely connected. So far nobody has pointed out an important fact: changes taken place in the early fifties – at the time the system of directive planning was created – explain the present degree of overconcentration only to a limited degree as compared to what happened later. Only as much as they led to the liquidation or fusion of undertakings belonging to the smallest enterprise size category. (This process took place in the form of "uniting" artisans in cooperatives and amalgamating most of the nationalized enterprises employing less than one hundred persons.) Among big enterprises changes took place primarily in the opposite direction: in some cases plants loosely connected to the mother-enterprise were separated and organized into independent enterprises (e.g. GANZ-factories, Csepel-factories). The consequence was an increased number of medium-sized enterprises. The emergence of the overweight of the big enterprises, prevailing at present in Hungary, is – as we shall see later – a development of a later period.

The large-scale liquidation of the smallest undertakings affected the Hungarian economy adversely (especially the population as consumer) and thus – as one of the factors of deteriorating living standards – it provoked criticism and temporary measures in 1953 (e.g. facilitating the issue of artisan's licences).

In the economic controversies and the formulation of views recognition of the deficiencies of the system of directive planning was much more important already in this

[1] Of the earlier publications the article of Mrs *Papp* (Jolán Ritter) – Mrs *Tüü* [1] should be mentioned in the first place in which they had pointed out in advance that the over-concentrated enterprise structure would hinder the unfolding of the reform of the economic control and management system (Gazdaság, 1968. No. 2). Some further references: [2], [3], [4], [5], [6], [7].

[2] György *Varga* has formulated it in the following manner: "The system of economic control based on the central breaking down of the plan indicators encouraged for increased enterprise sizes." ([7] p. 231.)

Gábor *Révész* also finds a strong causal relationship between the system of directive planning and the extremely centralized enterprise sizes [5].

period. This stage can be placed between the years 1953 and 1958. In the Hungarian economic literature the growing criticism of the system of directive planning and the gradual recognition of the importance of the price and money relations fall to this period. Suffice it to refer here to the works of Sándor *Balázsy*, József *Bognár*, Péter *Erdős*, Zsuzsa *Esze*, János *Kornai*, Tibor *Liska*, Antal *Máriás*, Tamás *Nagy*, György *Péter*, Jenő *Wilcsek* and to the great number of discussion papers published in Közgazdasági Szemle, as well as to the committee headed by István *Varga*, the accomplished task of which was a comprehensive evaluation of the economic control and management system in 1957. These unfolding views led directly to the concept of controlled market mechanism.

The concept (model) of the controlled market mechanism

The concept of the controlled market mechanism – as outlined over the years in the Hungarian economic literature – cannot be identified entirely with the formulation given by the resolution of the Central Committee of the Hungarian Socialist Workers' Party adopted in 1966 on the economic reform. The resolution was the result of a historical compromise and as such *beside* the elements of the controlled market mechanism it contained alien elements, too. (The source – the underlying concept – of these alien elements is not identical with the concept of the system of directive planning. Here we have a set of ideas equally different from the principles of the controlled market mechanism and the system of directive planning.)

As far as the concept of the controlled market mechanism is concerned, its basic idea is a reformulation of the roles of the state control and enterprise management. According to this the engine of economic development is the competition of independent enterprises in a great part of the economy,[3] the environment of which is regulated in a uniform manner by the state and – apart from the direct control of a limited scope – the state resorts only exceptionally to direct individual interference.

It does not belong strictly to our topic but I would like to mention that the discussion about the allocation system of investment has remained unsettled among the Hungarian economists. The idea of self-financing of development has been pushed more and more to the background. The view expressed by the resolution is that investment funds are centralized by the financial system and redistributed by the central economic control organs. The situation in this respect is practically unchanged even today and the principle of investment self-financing is raised even as a suggestion only sporadically. We are not going to discuss this here nor the other contradictions of the concept of the controlled market mechanism and its actual realization.[4]

[3] This sphere of the economy has been named by M. *Tardos* very aptly the "competitive sphere" [8].

[4] It could be a later task to study how the practical realization of the controlled market mechanism in Hungary was influenced by the survival of the management system that had emerged in

The controlled market mechanism assumes competition in a great part of the economy. However, the economic management functioning at present shows quite different trends.

The economic control mechanism built on the supply responsibility (monopoly position) of the enterprise and the enterprise size

In 1958 it was the *organizational* questions of the socialist economic control that were put on the agenda – thus pushing debates concerning the mechanism into the background for a longer time. In connection with the emergence of the problem let me refer to an editorial article of self-critical tone published in the January issue of Közgazdasági Szemle in 1958: "A serious deficiency of the debate concerning the further development of the economic management is that ... it neglects the discussion of organizational questions and centers almost exclusively around the so-called economic mechanism." [16]

At the beginning of the period the emphasis put on organizational questions was closely connected with the fact that from the second half of the fifties on significant changes were taking place in the organization of industrial management in a number of socialist countries. One of the main characteristics of these changes was the effort to reduce the number of stages in the hierarchy of industrial management. In the Soviet Union ministries of industrial branches were abolished and the control of the industry was taken over by the territorial organs, the national economic councils *(sovnarkhozy)*. In Bulgaria the majority of branch ministries were similarly abolished and the directorates in the ministries were also dissolved. Branch ministries were liquidated also in the GDR. Beyond this – with a combination of regional and professional aspects – enterprise amalgamations were created which gradually assumed enterprise management functions and thus in effect an energetic enterprise centralization took place. In Czechoslovakia industrial directorates were abolished and a large-scale enterprise centralization was carried out. The explanation of this was that after the abolition of the industrial directorates it would have been difficult for the ministries to cope with the control of the great number of enterprises.[5]

Reduction of the number of links in the control hierarchy can be explained by the belief, adhered to by many in the socialist countries, that the disturbances of the system of plan-instructions were atributable to the rigid nature of hierarchial control. Also the

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the early sixties. In the course of this a number of outstanding works should be reconsidered which analysed the situation of enterprises between 1968–1980. (To mention just a few: [9], [10], [11], [12], [13], [15].)

[5] At that time this process was illustrated by an article of Sándor *Balázsy* – György *Varga* [17], later the study by Tamás *Bauer* – László *Szamuely* [18] prestented an analysis of it – as a part of a more general overview.

amalgamation of sectoral ministries served the "simplification" of relations between the planning centre and the enterprise. The medium control levels were abolished in many places. By reducing the ramifications of hierarchy it indeed became an important aspect that the enterprises might be easily surveyed from the centre, i.e. that the number of enterprises be reduced.

In Hungary the reshaping of the industrial organization started in 1958 by "experimental" amalgamations of enterprises.[6] Imitation of tendencies appeared in the socialist countries, abolition of medium-levele management organs, liquidation of the hierarchy of breaking down plans in Hungary was not against the will of the adherents of the controlled market mechanism either. Some of them even accepted that in a non-hierarchical system it was necessary for the central economic management to deal with a smaller number of enterprises, larger amalgamated units. (C.f. [26].)

The reorganization of industry in 1962–1964 took place in such a manner – after prolonged internal debates (in the course of which plans of amalgamating branch ministries similarly to changes in the Soviet Union also held for a while). The main point of reorganization was the amalgamation of medium-sized industrial enterprises. It was this time that the present, essentially *big-enterprise structure* was created which is characterized by the relative lack of medium-sized and an almost complete lack of small firms.

In the course of the reorganization of the industry in 1962–1964 the medium-level industrial directorates were abolished; the number of economic untis under the direction of the Ministry of Heavy Industry diminished from 103 to 38; 126 industrial enterprises of the Ministry of Metallurgy and Engineering were reorganized into 16 industrial "big enterprises" and 22 industrial enterprises; the number of industrial enterprises belonging to the Ministry of Light Industry decreased to 85, 58 of which belonged directly to the ministry, 27 (those producing haberdashery and the printing industries) to trusts.

Reorganization of the food processing industry was started earlier. Amalgamations were carried out in 1959 in the beer industry, in 1961 in the liqueur industry, in 1962 in the industry of cosmetic products and household chemicals and further in the milling industry and also in the trade of agricultural products. After 1962 further big nation-wide enterprises were created (knitting industry, confectionery industry, tobacco industry, distilling industry, sugar industry, vegetable oil industry, industry of food-processing machinery, etc.). Trusts were established for the direction of trade in animals, the meat industry, the canning industry and the dairy industry. After the reorganizations under the direct control of the Food Processing Ministry there were 12 industrial big enterprises and 5 trusts.[7]

The aim of the reorganization of the industry was defined by the report of the Central Committee to the 8th Congress of the Hungarian Socialist Workers' Party (held in November 1962) as follows: ". . . one of the essential aims of the present reorganization

[6] In the fourth quarter of 1958 and in the first one of 1959 93 enterprises were united in 13 new economic units.

[7] The source of data is a book by István *Kahulics* published in 1966 [21].

of industrial management is to reduce the number of directing (control) organs from the plant to the ministry. Our idea is to increase the scope of activity, independence and responsibility of managers directly in charge of production control." [22]

There were other, more detailed writings published about the causes of the reorganization of the industry, the aim of the amalgamations of unprecendented magnitude (the immediate difficulties and in cases immediately perceptible adverse effects of which I am not going to discuss here). As we shall see later, it appears from these publications that in the background of the reorganization there were among others simultaneous efforts aimed at the strenghtening of centralized management and the realization of certain elements of the controlled market mechanism. This effort has grown later into a definite tendency.

The key-word was the increase of *enterprise independence.* However, the interpretation of enterprise independence did not mean at all the autonomy of enterpreneurs participating in competition, which would be assumed in the competitive sphere by the controlled market mechanism. In early 1963 the connection between independence and enterprise size was formulated in an article by a top level leader of the National Planning Office, as follows: "It is reasonable to organize enterprises of such size in which methods of enterprise management can be properly applied but the managers of which have adequate authority and responsibility as far as own products are concerned." [23] The aim of the reorganization was explained in a more detailed manner – basically in a similar spirit – by a head of department in the Ministry of Finance in his article "The effect of reorganization on the independence of industrial enterprises" in 1965: "The small enterprises are – by their economic position – incapable of recognizing social interest. The reorganization – the creation of big industrial enterprises, national companies or trusts comprising whole industrial branches – has brought a greater opportunity for a 'clear sight' even at the level of the economic units. This creates new perspectives in the management of enterprises . . . Simultaneously with the explained rise in the standards of management of the big industrial enterprises and trusts it is inevitable that the control activity of the ministries should undergo certain modifications. In every case when the given economic unit – either as a national level enterprise or profile-holder[8] – has a complete picture of national economic needs and of resources which may be used to satisfy them, the interference of the ministry is superfluous . . . The close control by the ministry and the system of plan indicators expressing detailed regulation, may be, moreover should be replaced by such a form of control which is less detailed and which only determines the main development trend of the enterprise, regards the economic unit as 'grown up' and liquidates paternalism which is inevitable in case of small enterprises." [24]

These thoughts point in such a direction that after the enterprise concentrations, and relying on the large enterprises and trusts which obtained national authority and have

[8] I.e. one having monopoly of (and responsibility for) the production of a certain product (translator's note).

a "view" over their own field, it is possible to face without fear even an economic control system without plan instructions – since large enterprises will realize national economic interests in their own fields.

This is the mechanism which we call the *mechanism built on the responsibility for supply of the enterprise (in other words: on monopoly position created by the state).*

The foundation of this mechanism, the concentrated large enterprise in monopoly position at the market of some individual product groups and which can be made responsible for the proper assessing of demand for the given product group (i.e. for planning in this field) and for a production volume satisfying the demand assessed (responsibility for supply). Within its own field the enterprise is the pledge of development. Its monopoly position is directed at a specific product group, a *profile* and within this area it extends to development and product replacement, too.

In fact: in accordance with its logic the reorganization of the industry has been closely connected with the "cleaning of profile". The decree on the "holders of the profile responsibility" issued in 1962 already defined the responsibility of the enterprise for preserving the level of certain production branches and for harmonizing to a certain degree development and production. Certain enterprises were given the authority to manage the development of their own products independently and their role was also increased in the sales and distribution of the product. This was promoted by the organizational changes [25].

However, the mechanism built on the responsibility for supply supposes *clean profiles* and it is an integral part of the mechanism that no uncontrollable competitor can interfere with the profile of the responsible enterprise. It is no coincidence that around 1973–1974 the large enterprises protested vehemently against the activity of the auxiliary plants of the agricultural cooperatives which disturbed them. At the same time, a new wave of profile cleaning started, moreover there were efforts to introduce again the institution of profile managers. All this provoked a resolute opposition by the adherents of the controlled market mechanism [26].

Apart from factors mentioned so far, the first half of the sixties was a period of large-scale central development programs also in the competitive sphere (e.g. in the engineering industry) [27]. Concentrating on these programs, the government economic control agencies considered the problems of economic areas not belonging to the central development programs (a great part of the competitive sphere, e.g. branches producing consumer goods) as essentially solved through the responsibility for supply of the nation-wide large enterprises.

By way of digression let me mention: it follows from the nature of responsibility for supply that it concentrates on the end product. The creation of the intermediate conditions necessary for the production of the end product is regarded as a task of the enterprise responsible for the supply. At the very most the enterprise can ask for help – for support to merge subcontractors with unpunctual deliveries, or for investment to extend its modern capacities also to these production stages instead of "patching up" spare parts, components and semi-finished products. Thus the responsibility for supply

has become a major justification for the enerprise concentrations and amalgamations, for the expansion of the large enterprises.

The validity of the economic control mechanism built on the responsibility for supply did not end in 1968. The elements of economic control built on the responsibility for supply of the engerprises have remained even after 1968 – they can be found even today – and they exert a strong influence on the practice of economic management, frequently forcing enterprises to make decisions contrary to their own profit motive.

Nevertheless, introduction of the elements of a controlled market mechanism exerted a perceptible influence on the activity of enterprises. For example, the possibility of choosing among the directions of sales allowed some scope for manoeuvring even despite the highly centralized organizational structure, for both buyers and sellers and through this it pushed the producers, to a certain extent, in the direction of flexibility. However, the emergence of positive effects was strongly retarded by the fact that the reform of economic control and management in 1968 tried to evolve the controlled market mechanism after the mechanism built on the responsibility for supply and the corresponding organization had strengthened, leaving them unchanged – one might say by settling down on them.

Some further characteristics of the mechanism built on supply responsibility

In order to make the responsibility for supply the compass of enterprise activity instead of central plan instructions first of all such large enterprises were required which would be capable to undertake this responsibility in certain individual fields by their very size. As a consequence of the enterprise mergers of 1962–1964 and of subsequent years this situation indeed came about and later further strengthened.

By wishing to introduce the elements of controlled market mechanism and within this to make enterprise profit the compass of enterprise activity, the reform of the economic mechanism created a contradictory situation. As a matter of fact, there were two compasses at the same time: responsibility for supply and the profit-motive and the two did not point in the same direction. According to experience it was the supply responsibility of the two that dominated, that was taken seriously by enterprise management.[9] Beyond this there were other economic policy aims which were set by the central

[9] In 1975. M. *Tardos* wrote about the existence of two views. One of them corresponds to the idea of supply responsibility, the other to the principle of profit motive. He writes about the former the following: "One of the views can be formulated in that it is not sufficient to determine the order of economic and financial regulation after having eliminated the difficulties of economic control as expressed in the plan instructions and in allocated supplies but the planned and centrally defined functional division of tasks among sectoral ministries (sub-institutions) and within them among enterprises (organizations) must be maintained and further developed. The producing and commercial enterprises must be made responsible for satisfying the needs of a certain sphere of buyers." And he adds: "Owing to various reasons, during the seven years of the new economic control system up to now it has been the opinion of the holders of the first view that has prevailed." [14]

organs as special tasks to the enterprises – with reference to national economic interests. One of the most important of them was to increase *export* against convertible currency. In this case national economic interest got into contradiction not only with the enterprise interest but frequently also with the possibility of realizing the responsibility for supply. Thus the task of increasing exports has not been integrated so much into the system of oebjectives of enterprises and branches as the supply responsibility; consequently, its fulfilment called for external interference.

The strengthening of the role of profit was greatly hindered because even the most enthusiastic adherents could not maintain with a clear conscience that profit oriented adequately in the transformation of production structure. It was obvious that if the task of profit maximization were taken "literally" by the enterprises it would frequently jeopardize supply. With rigid prices and inflexible supply it could happen regularly that products in great demand appeared unprofitable. One could not expect that the emerging gap would be filled by new ventures since – except for the short period 1969–1970 – there were none.

Those who basically approved the profit motive had very many reservations against the price mechanism and other elements of the regulatory system. From this followed the frequent modifications in the regulators and this was taken by the enterprises –rightly – with more or less irritation. The really important thing for them remained to cope with their supply responsibility: this was expected of them by their branch supervisor. The mechanism, improvement of the regulatory system were not taken really seriously either by enterprises or the industrial control organs.

The mechanism built on the responsibility for supply of the enterprise differs from both the mechanism of directive planning and the controlled market mechanism. *In the system of directive planning the survey of demand is a task for the central planning organs.* The enterprises are responsible for observing the central plan figures and not directly for supply. (It is another question that this concept has never ben realized in its pure form.) *In the system built on the supply responsibility of the enterprise, the survey of demand is a task for the enterprise, plans are prepared by themselves.* However, the planning of large enterprises in monopoly position raises – following from the system itself – problems similar to those of central planning in the system of directive planning. Central planning cannot pay due regard to a wide product assortment, to demand for small series, quality, servicing, supply of spare parts, because, following from its nature, it can deal with only a limited number of matters. This is why in the mechanism built on the supply responsibility of the enterprise the planning of the large enterprise pays no attention to all these either, because the producing enterprise in monopoly position is interested in the output of the smallest possible number of products in the largest possible series and it is not forced by competition to undertake those extra costs which are associated with keeping the range of assortment and quality constantly at a high level and ensuring good servicing and supply of spare parts, etc. If, however, managers of certain enterprises tried – from conscientiousness as against the apparent intersts of the enterprise – to observe "national economic interest" and to account for the viewpoints

of users, to regulate output in accordance with demand, they found equally impossible to obtain a direct knowledge of them as any official in the system of directive plannings. In most cases real needs reached their writing-desk only when a scandal broke out because of the complete and permanent shortage of some individual products.

As we have seen, the concept of a system built on supply responsibility has become closely interlocked with the process of enterprise amalgamations, in the eyes of the control organs the former is an explanation for the latter. This, however, does not explain why the amalgamating enterprises and in most cases even those being amalgamated were happy about the same. Even a sketchy discussion of this latter question would require the evaluation of quite different aspects and at least another article, therefore I am forced to neglect it here.

Conclusions

It seems that recently more favourable conditions have been created in Hungary for advance in the direction of making the controlled market mechanism really effective, i.e. making enterprises try to survey demand on the market – guided by their profit motive.

In order to ensure this, simultaneously with creating a number of other conditions, the mechanism built on responsibility for supply and the associated attitude should be abolished. In this respect I consider the amalgamation of the branch ministries and the establishment of the Ministry of Industry on 1st January 1981 as a significant step since in the supervision of the supply responsibility they were the official partners of the enterprises and, at the same time, also their main supporters in actions aimed at the protection of "profile" under the pretext of supply responsibility and also in financial negotiations.

Further, it is also necessary that the monopoly position of the enterprise regarding the given product group be broken. In this respect there are encouraging signs. For example in case of cooperatives constituting an important group of enterprises in the competitive sphere the scope of products has been recently diminished whose production was forbidden or for which special licences had to be issued to them.

In a great part of the competitive sphere support for the creation of new ventures is an important instrument of breaking monopoly positions. The main danger in this field seems to be rashness, impatience and campaign-like attitude.

Finally, monopoly positions can be liquidated also in such a manner that large enterprises consisting of spearate workshops and plants disintegrate into their elements. This is especially evident in case of large "national" enterprises which had been created by amalgamating horizontally enterprises working in the same product group (in a number of cases the separation (breaking up) of artificially connected vertical units would also be a reasonable solution). Quite a lot has been done in this respect. It should be emphasized: it is not speed that is important but consistent progress.

As a consequence of disintegrations the enterprise size pattern will change favourably. I consider it as a major advantage that more favourable conditions will emerge for the development of the controlled market mechanism.

Naturally, the question arises: whether the competition of small and medium-sized enterprises with parallel profiles leads also to losses. I believe that the evolution of competition would inevitably entail such drawbacks. I am confident, however, that the sum of losses incurred in this manner would be significantly smaller than damages caused by inflexibilities and shortages necessarily accompanying monopolized production and "clean profiles".

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НЕКОТОРЫЕ ВЗАИМОСВЯЗИ МЕЖДУ ОРГАНИЗАЦИЕЙ ПРЕДПРИЯТИЯ И ХОЗЯЙСТВЕННЫМ МЕХАНИЗМОМ

И. ШВЕЙЦЕР

Реформа хозяйственного механизма застала в Венгрии в 1968 году такую организацию предприятий, степень централизации которой можно считать почто без прецедента в мире. Состав промышленных предприятий по величине характеризовался преобладанием крупных предприятий и почти полным отсутствием мелких и средних предприятий. Такой состав предприятий возник не в период национализации, формирования организации социалистической промышленности и создания директивного планового хозяйства — тот период характеризовался преобразованием мелкой кустарной промышленности в средние предприятия и «чисткой» их производственного профиля. Создание структуры с преобладанием крупных предприятий является последствием широкой реорганизации, осуществленной в промышленности в 1962—1964 гг. В этот период система директивного планирования уже наталкивалась на многочисленные трудности и функционировала с явными помехами, а концепция регулируемого рыночного механизма еще находилась на стадии формирования. Было очевидно, что необходимо существенное расширение самостоятельности предприятий.

По мнению автора, более-менее декларированной целью реорганизации промышленности 1962—64 гг., создания крупных — охватывающих иногда целые отрасли промышленности — предприятий было как раз предотвращение угрозы конкуренции, т. е. так называемых стихийных процессов, могущей возникнуть при управднении системы директивного планирования. Об этом свидетельствует и осуществленная тогда же строгая «чистка» производственных профилей предприятий. Вместо центральных органов планирования задачи планирования потребностей и ответственность за снабжение налагались на крупные предприятия. Хотя устранение конкуренции, монопольное положение крупных предприятий и противоречило концепции реформы 1968 года, тем не менее, после реформы не была осуществлена поправка организации предприятий. Таким образом, ответственность предприятия за снабжение стала ключевой категорией управления экономикой, препятствуя развертыванию положительных эффектов хозяйственной реформы. В последние годы условия для более полного претворения в жизнь в Венгрии концепции регулируемого рыночного механизма стали более благоприятными, но для этого необходимо также преобразование организационной структуры промышленности и организации предприятий.

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GY. VARGA

MANAGEMENT – IN A FAST CHANGING ENVIRONMENT*

In the 80s a new wave of changes is occuring in the Hungarian system and methods of management, which will perhaps be more radical and more dramatic than was the 1968 reform. The economic, social and political factors constituting the enterprise environment are experiencing a significant transformation, hence management must also face new realities.

In the world market there is a competition not only among manufactures and technologies, but also the company administration and management methods established in the individual countries compete with one another. The role played by the culture of management as a competitive factor is the greater the more modern and more science- and technology-intensive is a given country's industrial structure.

"What is the system and standard of management of the Hungarian enterprises like? What is most characteristic of the practice of management? " I put to myself such and similar questions when begining to write this paper.

My examinations and the talks I have had with leading executives have convinced me of the fact that in our days the Hungarian management system is characterized by *change,* and a fast and far-reaching change at that. Therefore, of the present situation only a "snapshot" can be taken and it is to be known that some movement, some change took place already before the "time of exposure".

The changes of historical significance following the nationalization of industry and the establishment of the system of planned economy, then the introduction of the economic reform in 1968, appear to be followed in the 80s by a third big wave of changes in the system and methods of management, which will perhaps be more radical and more dramatic than was the 1968 reform. The reason is that the economic, social and political factors constituting the enterprise environment are experiencing a radical transformation, hence management must also face new realities.

The nature of changes is also different from that of the 60s, when development was characterized by some sort of regularity and continuity; consequently, the processes could be forecast with a fairly great certainty. Present-day is characterized not only by a change of past processes but also by entirely new phenomena and events that can mostly not be foreseen. P. *Drucker* calls this decade a turbulent time. "Turbulence, by definition, is irregular, non-linear, erratic", he writes [1].

In such conditions management can only ensure a competitive subsistence of the enterprise if it recognizes the most important factor (or factors), the most fundamental

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new reality, which is the cause of discontinuity, irregularity, "turbulence". Therefore, the attention of management must be turned to the *fundamental factors,* to the circumstances modifying the configuration of the economy, much more than in the past.

The present period has not only pitfalls for management but also great possibilities for those who comprehend, accept and exploit the new realities.

The system and methods of management are in close conncetion with macro-economy and with the methods of control and management of the national economy.

Modification of course in economic policy

The Hungarian economic policy responded with some delay to the changes having occurred in the world economy. The discussions about the rate of economic growth, about the redressing of the upset balance of the economy, and about the modification of the growth path lasted from 1974 to practically late in 1978, and an economic policy concept consistent in its fundamentals was formulated in 1979. Some find the essence of the new concept in a deceleration of the rate of growth, which, though its important element but rather its consequence, does not anyway bring to expression the whole of it. I call attention to this point because some experts reduce the essence of the new growth path, to just the quantitative interrelations though the stress is in fact on *qualitative changes.*

It is just in connection with these qualitative factors that I should like to call the attention to the fact that some important traits of the current course of growth are not entirely new. What is new is partly a more up-to-date interpretation of the requirements formulated previously, an *appearance of them in a new context.*

Just for the sake of example, a few of them will be mentioned here:

Still some years ago we argued that it was primarily an exhaustion of the sources of labour that forced us to change over to an intensive path of economic development. Today, however, we are of the view that labour in Hungary, on the whole, constitutes ever less a bottleneck, and as far as can be foreseen, this situation will even improve in the future. I am saying it emphatically: this refers to the relationship between the *total* demand and supply of labour. In such conditions we are obliged to reassess the interpretation of intensive development.

The whole system of economy needs to be shaped so that it divert enterprises towards the course of intensive development. An intensive economy should be concerned not only with a saving of labour but also with fixed and circulating assets, energy sources, raw materials, the arable land, the waters, and infrastructural capacities.

A novel interpretation of intensive development is required, furthermore, by the fact that specific investment (that in relation to the existing stock of fixed assets) is experiencing in this decade a radical slowdown, wherefore new developments will exercise an ever lesser impact on the transformation of structure and on the evolution of efficiency. On the other hand, increasing interests will be tied up with *a rational*

operation of the existing producing machinery, with a decreasing, flexible use of factors of production.

In a certain sense the role of the *market* is also being reassessed. The proportion of exports in relation to the GDP almost doubled between 1965 and 1975, and this is by itself a circumstance worthy of attention. Much more important than this is, however, that the character of export markets and of competition on them changed in many respects. The rate of expansion of the domestic market is also decreasing, while demand is becoming more differentiated and more exacting.

In a certain sense it was this recognition that was formulated in a document of great significance of the Central Committee of the Hungarian Socialist Workers' Party published in October, 1977, which determined the main directions of a long-term external economic strategy and of a production structure policy. This decree declared that the shaping of the production structure must be subordinated to the interest of improving international competitiveness. Yet I agree with Béla *Csikós-Nagy* who regards as a deficiency of the decree that "... it starts from stating that in the assessment of long-term development goals it is primarily the technological criteria that play a role" [2]. Presumably it was attributable to this fact and to the one-sided interpretation of the technological and economic criteria – the competitive volume of production, the scientific and technological background, an up-to-date policy of marketing and market position, furthermore infrastructure – that the October 1977 document approached the tasks of structural change still from the side of *production (supply).*

It has been proven by the time having passed since that any rearrangement of the structure has *market (demand) as its starting point and end.* In the competitive sector of the economy the volume of production and the possibilities of its increase are primarily determined not by the factors of production but by the market, i.e. demand. Therefore, such changes are necessary in the whole institutional system of economic management as allow a formation of incomes only in the case if an enterprise adjusts itself competitively to the solvent demand. This is not in contradiction with the recognition that the market is suitable in the first place for short-term orientation and that the concepts of technological development and of certain structural transformation must be elaborated on the basis of the development trends of science and demographic, ecological and other factors.

I don't want to go into further details of the issues of interpretation connected with the new growth path, though mention could still be made of the changes having come about in the interpretation and economic strategy significance of quality, professional training or innovation. The essence is that structural adjustment, structural transformation cannot be restricted merely to a transformation of the production or product pattern. The latter is just a component of the former. *Structural transformation also includes a renewal of the qualitative and quantitative composition of the input pattern, that of the market policy and of the institutional system of national economy, and that of the enterprise management system.* The interpretation of structural adjustment as a renewal of production and technology cannot bring, by itself, satisfactory results.

Until the late 70s it was relatively easy for us to maintain a high rate of economic growth as we could draw on different resources: an amply available source of labour and the resources accumulated in agriculture. There was a time when we created the conditions of a high rate of growth at the price of infrastucture, and later we availed ourselves, to the same end, of external resources.

In the 80s and 90s, however, *all factors of growth will become scarce,* and simultaneously at that. We cannot afford, consequently, to save one resource at the expense of another. It is necessary to choose such a strategy as permits, or ensures, an efficient utilization of *all* resources.

It follows from the above that the scope of economic policy is relatively narrower and the possibilities of growth are more determined than in the past. In such conditions the role of the *methods* of economic policy to be applied – or in a broader sense, that of the *institutional system* – gains in significance. In this connection the institutional system also advances to the rank of some sort of "factor of production".

In consequence of the narrowing scope of economic policy, the manoeuvring capability and faculty of the micro-sphere is gaining in significance. The economic units can disclose such additional resources (intellectual, material and financial resources) as cannot be approached and seized by the state economic policy with its own system of instruments. That is one of the reasons why it was not reasonable to respond to the challenge of world economy by restricting enterprise autonomy, pressing back entrepreneurship, and increasing organizational centralization.

Increasing economic pressure – changing institutional system

Consequently, the role and importance of management has, objectively, been upgraded. Its function and character is being revalued. Undoubtedly, an important role is played in this by the changes having taken place in the environmental factors.

The most significant among these is the introduction of a competitive price system, since international competitiveness is gradually becoming determinative in the control of the shaping of the profit and loss of economic organizations and in their supply pattern.

Following from the logic of the competitive price system, the exchange rate policy has become more flexible than previously. The occasional modification of exchange rates was replaced by monthly exchange rate adjustments, and just recently the weekly following of exchange rate movements on money markets has ben introduced.

The increasing burdens laid on enterprise profits, the obstruction of the channels of easy money-making, the budget restrictions having become tighter, are all in connection with the introduction of the competitive price system and with the new development policy.

For characterizing the situation I mention that in industry* the amount of normative financial preferences was reduced very considerably, by some 40 per cent, in 1980.

*Excepting food industry.

This radical cut in the possibility of making "easy money" and that budget restrictions have become tougher are indicated by the fact that in industry and in the building industry a larger number of enterprises than ever – some one fifth of the industrial enterprises and about 11–12 per cent of building industry enterprises – are faced in 1981 with financial, liquidity problems. These are enterprises in which investment funds do not cover financial commitments or in which the reserve for development is very small. In a particularly grave situation are 22 industrial enterprises and 12 building industry enterprises, as these are no longer in possession of the reserves which would be sufficient for them to cover in the following year, even transitorily, their financial commitments falling due.

If an enterprise is faced with *transitory* financial problems that can be overcome within one or two years, it can also apply for a bank credit in addition to using its own resources. In the case of *longer-run* liquidity difficulties the enterprise has to make a plan of consolidation. If this provides a suitable guarantee for its getting out of the financial problems, the state may grant it an aid for production modernization. However, this aid is *provided for a definite period,* it is of a *degressive* nature, and of the expected result *an account may be demanded.* The enterprise and the financial institution conclude a contract on the scheduled payment of the aid for production modernization. More and more leading enterprise executives are heard to say that because of the new conditions of management the Hungarian enterprises start, in the international competition from, so to say, a more disadvantageous position than their competing partner.

After a long time, some other elements of the institutional system of the economy have also ben changed. Most important among them was liquidation of the three sectoral ministries of industry and creation of a unified ministry of industry in 1981. This has contributed considerably to eliminating sectoral separation. And thanks to the new ministry's modified sphere of authority and its new work-style *the pressure of state hierarchy has been alleviated and the hierarchic dependence of the state-owned enterprise has become looser to a certain extent.*

The changes having occurred in the judgment of the situation and role of enterprise and management – changes imply here life itself – raise new requirements towards the law on enterprises enacted in 1977. One of the essential issues is the determination of the *function* (special line, scope of activity) of the enterprise. The fact is that in many cases the founding organ defined the enterprise's scope of activity very circumstantially, in very narrow terms, limiting thereby its possibilities of manoeuvring, the justified elimination of certain activities, initiation of new functions, or necessary diversification. Practically, there have been possibilities for such actions, nevertheless the inflexible definition of the scope of activity reduced in a certain sense the responsibility of management, set limits to entrepreneurship, and resulted in a bureaucratic treatment of the judgment of modifications in business policy.

In the interest of a flexible adjustment and of strengthening entrepreneurship it would be justified to declare that in the need of foundation the scope of activity on an enterprise should be established in broad terms, making at the most reference to the

special line. It would also promote a flexible adjustment if in the future any ancilarry activity – that is one which differs from the basic activity – had to be brought to the founding organ's knowledge only if the sales receipts achieved with that activity exceeded a certain percentage (e.g. one third) of the total sales receipts. It is expedient to allow the enterprise to decide autonomously on the conduct of any ancillary activity.

Organizational changes

The experts participating in economic debates propose an extension of the *right to found enterprises.* Up to now – in compliance with the law on enterprises – it has been the right of ministers, of heads of national bodies, and of local councils to found enterprises. The latter had no right of foundation, themselves, and that was a barrier to capital flow. It is proposed now that an enterprise may also found an ancillary undertaking in the form of *sister firm.*

The sister firm – as a new form of undertaking – should be a legal entity. The parent enterprise is to supply it, at the time of its foundation, with the means necessary for attending to its sphere of activity. The former is to have a share of the sister firm's net profits after taxes. And for the debts of the latter the founding enterprise bears responsibility as guarantee. The need of foundation of the sister firm is to contain the rights and duties which lie with and devolve on, respectively, the parent enterprise and the sister firm in the course of their co-operation. For the foundation or liquidation of a sister firm, for the definition and modification of its scope of activity, no preliminary approval should be necessary on the part of state economic control organs. The director (and his deputy) of the sister firm should be appointed by the chief executive of the parent enterprise.

In the economic debates the idea was also raised that on the basis of a government authorization other state organs, including financial institutions, should also be able to avail themselves of the right of enterprise foundation. Extension of the right of enterprise foundation would mitigate the effect, objected to with good reason and not complying with economic rationality, which ensued from the approach that enterprises had to spend their resources available for development, or the larger part of them, on their own development even if the expected yield of the action did not ensure a suitable return [3, 4].

Up to now several such measures have already been introduced which promote the foundation of *small-scale enterprises.* It is expedient to provide a legal possibility for any founding organ to establish also enterprises in which management and organization are relatively simple and not a copy of the organizational model of a big enterprise. The peculiar traits of small-scale enterprises are manifest in internal organization, in a less sophisticated system of accounting, records of operation, taxation and management. On the basis of the experience so far gained it should be declared that the founding organ cannot order such an enterprise to carry out definite activities, it cannot withdraw assets

from it, and no economic rehabilitation process can be applied to it, that is to say, a small-scale enterprise not proving profitable should be liquidated.

A process of liquidation has been launched for winding up the excessively large, above all horizontally organized, economic units (e.g. trusts). In specific special branches these have, so to say, enjoyed a monopoly position. Until July 1981 the situation of 60 big economic units was reviewed by a special committee. Organizational changes were proposed for 33 of them. Thanks to the decentralization 18 trusts and big enterprises were liquidated (e.g. in coal mining, sugar making, wine processing etc.). The separations have resulted in the establishment of 123 new, autonomous enterprises.

Organizational decentralization has the effect of strengthening market relations, improving the chances of competition among enterprises and, instead of a levelling following from the practice of "the big hat protecting all", a differentiation depending on the evolution of competitive positions is unfolding.

The managers of thirty-nine enterprises having been made autonomous were questioned about organizational independence, and 36 favoured the idea. They said: "the circumstance that they sense directly the effect of the market, that they have come under the pressure of economic environment, and that they have to face the consequences of their decisions on their own, has soon disengaged a large amount of impetus, as a result of which . . . the modernization of the product pattern has accelerated, technical development and market research has brisked up; various enterprises have reviewed their concept of investment formulated in the previous organization and have found more economical solutions than earlier . . . 'we calculate in a different manner if it is up to us to pay the piper' . . ." [5].

In part of the separated enterprises the *desire of becoming autonomous* had emerged earlier. Above all those units and factories, respectively, controlled by trusts and big enterprises wanted to become autonomous which *were strong economically* and part of whose resources were diverted by the trust or the big enterprise to other, economically weaker units. Efforts at separation were manifest also in factories which carry on an activity alien to the main activity of the parent enterprise; others again felt that they were just "sideline" establishments of big organizations, wherefore they were not in a position to implement a technological innovation, to achieve an economic "breakthrough" even if they contributed to total enterprise profits a greater share than was commensurate with their own size.

Of the 39 enterprises having become autonomous, which I have interviewed, 19 reckon on *competition brisking up* on the domestic market (wine-cellars, enterprises of the confectionery industry, tobacco industry, shoe industry and building industry, furthermore half of the engineering industry enterprises having become autonomous). It must be taken into account in assessing the proportion of the enterprises reckoning on a brisking up of competition that 8 out of the 39 are coal mining enterprises. The elimination of organizational monopoly may in general entail a brisker competition in the areas where *production* (product) *monopoly also comes to an end.*

Both economists and state organs make efforts to identify in the sphere of state property the mechanism of organizational mobility which indicates in due time the necessity of, and also permits, an organizational change (whether towards concentration or decentralization), and so at that, that any intervention on the part of state organs should be restricted to the narrowest scope possible. At present such a state assistance is still necessary. It is expedient to declare that an organizational change could be initiated by the head of the affected unit itself.

The following Table is a summary of the forms of state, co-operative and private undertaking which are already functioning and on which a law was enacted in August this year.

Recently lots of new elements and possibilities have been added to the forms of undertaking and enterprises. Today it is much more possible, than it was in the past, to choose the enterprise organizational form corresponding to, and complying with, the character and nature of the activity carried on and of the market. In our days there is a much greater possibility, than at any time previously in the period of planned economy, to eliminate the often unnatural contradiction between the function and the size of enterprise and the form of undertaking.

Encouragement of private initiative and of the establishment of small-scale enterprises often gives cause for misunderstanding: some experts abroad are inclined to believe that we should like to unfold entrepreneurship in this field alone.

It is hardly conceivable that *without* big enterprises, or particularly *to the detriment* of big enterprises, we could make small-scale undertaking flourish. All over the world it is the *big enterprises* that create – to a minor or major extent – the conditions for the foundation and operation (marketing) of small-scale enterprises (through allocation of capital, transfer of technology and management, long-run orders etc.).

Furthermore: in the spehere of small-scale enterprises flexibility and the capacity for self-adjustment can really unfold only if, in turn, in the sphere of big enterprises market impacts and efficiency requirements can be enforced and the constraint of flexible adjustment can be intensified. There are lots of signs showing that in the present conditions smaller-scale undertakings feature a behaviour similar to that of big enterprises. The *market,* at least from the viewpoint of its character, is determined by the behaviour of the economic units being in possession of the overwhelming proportion of the engaged assets. Therefore, what can be considered of importance is above all the creation of entrepreneurship in the sphere of big enterprises. (A strengthening of private undertaking may be of importance in certain fields of production, and mainly of services, but its role will not become determinative in the whole of the national economy.)

Extension of the right to foreign trade

The state monopoly of foreign trade finds shape in organizational forms complying better with up-to-date market requirements. Part of the measures serving modernization are based on the principles of the 1968 economic reform: in their spirit a further

Forms of Small-scale Undertakings

Denomination of undertaking	Sphere of action	Number of members or employees	Financial responsibility
1. Craftsman	What the licence is issued for	3 employees 3 members of family 3 apprentices	With all private property
2. Private shopkeeper	Retail trade Catering trade	2–6 employees 6 members of family	With all private property
3. Contract-based operation	Trade Catering trade	5–12 persons	With all private property (obligatory insurance)
4. Civil law partnership	Economic activity for achieving some common goal	No upper limit	With the private property of members
5. Industrial co-operative	For production of anything excepting a number of state monopolies	Minimum 15 members	Common property and contributed property of members to the extent of shares
6. Small co-operative	Services, in the first place	Maximum 100 persons, members with chief and secondary occupation and employees	Common property and contributed property of members to the extent of shares
7. Semi-autonomous work-groups of state agricultural enterprises and co-operatives	Activities related to agriculture	No upper limit	Property of the co-operative or state enterprise
8. Semi-autonomous work-groups for industrial production and services	Commodity production, services, commission works	No upper limit	Property of the parent co-operative
9. Enterprise-based business circles (linked up with state enterprise)	Consumer and other services and production	30 persons (from the employees of the state enterprise)	Contributed property and income of members; towards third persons + state enterprise's liability for damages

decentralization of the authorization for handling foreign trade has been implemented. At present, in addition to a couple of dozens of specialized foreign trading enterprises some 110 producing, marketing, servicing and transport enterprises are authorized to carry on foreign trading activities, and the number of occasional licences – connected with various cases of co-operation or major businesses – amounts to some 300.

Another trend of renewal can be identified in the coming into being and spreading of foreign trading partnerships, which is a form of relations designed to lessen the differences in interests of the producing and foreign trading enterprises and to improve their co-operation. So far, mostly last year, some seventy foreign trading partnerships have been established, with the participation of almost a hundred and fifty producing and user enterprises.

In addition to all these, changes of a pioneering nature have also unfolded. One of the basic rules of foreign trading activity, as recently declared by the Foreign Trade Law, has been as follows: every indigenous enterprise is authorized to sell and buy for any foreigner goods, rights representing material value, and services, to enter with any foreigner into production and specialization relations, and this within the framework of the "authority regulation" of foreign trading activity. In want of an own licence, however, the sole partner of the indigenous producer-user-marketer could only be the foreign trading enterprises specialized for the selling and purchasing abroad of the given commodity or service. That is to say, the state monopoly of foreign trade appeared in the form of commodity monopolies and restrictions to special lines, and there was no possibility to make a choice among the specizalized enterprises.

A meaningful progress has been marked in this field by the assurance of the right of choice. Last year four foreign trading enterprises – the newly established Generalimpex, furthermore Hungagent, Interag and Intercooperation – were licensed to handle non-rouble exports without restrictions to special lines, whereby the institutional and enterprise organizational conditions of choice were also laid down. In August 1981 such legal measures entered into force as have provided a wider scope for changes than was available previously. The modified system amounts to a further – this time already considerable – extension of the right of choice for effecting exports. In August the specialized foreign trading enterprises previous restriction to special lines was lifted in relation to almost the whole of machine exports, including some four thousand products. The engineering industry enterprises unauthorized to handle their own exports now have the possibility to choose, for effecting exports, from nine foreign trading enterprises specializing in engineering exports and four more foreign trading enterprises with a general scope of activity.

*

I have not the slightest intention to overrate the changes taking place in the institutional system, and I also take care not to make prophecies, since who could predict presently the "final outcome" of these movements. All the same, there are a number of socioeconomic circumstances that are worth calling attention to:

1. The legal rules relating to the institutional changes are not the product of a speculative "laboratory" work. Part of the new enterprise forms had been *called into being by market requirements* still before the relevant legal regulation was formulated. I think here, above all, of the secondary economy as a whole and especially of the ancillary activities established in agricultural co-operatives. It may though sound strange, but the majority of industrial small-scale plants are active within the framework of co-operative farms. They engage in subcontracting, construction and maintenance activities. In 1981 it was the non-agricultural (i.e. industrial, construction, service) activity carried on within agriculture that developed most dynamically, namely by some 9 per cent. The proportion of this activity exceeds one fifth of the gross output of agriculture.

The private plots integrated into co-operative farms likewise served as models for legislation.

2. The organizational changes allow a wider scope than ever before for entrepreneurship and even encourage it. (For example, it is decreed by law that the competent administrative body cannot weigh the pros and cons of some industrial activity being necessary or not. It *is to* issue the trade licence applied for by any person over 18 who otherwise meets the conditions specified in the relevant legal rule.) The unfolding of entrepreneurship goes hand in hand with an acceleration of innovation, with a better satisfaction of differentiated market requirements, and with a more flexible self-adjustment to markets. As a matter of fact, an intensification of entrepreneurship may, to a certain extent, disclose *new sources* for growth. That is what is borne evidence to by the examinations I have made: it is a fact that in the semi-autonomous work groups and business circles established within the framework of big enterprises labour productivity and intensity exceeds by some 30–40 per cent the level achieved in conventional work organizations, but in certain instances – e.g. in transport – double performance is not a rare occurrence either.

These experiences also imply a criticism of both the organizational level and motivation in large enterprises and will force, sooner or later, the large organizations to radically revise their work methods and wage regulations.

3. The institutional changes are in accordance with the circumstance that socialist economy is a multisectoral economy in which beside the state ownership of the basic means of production, a *diversity of forms of ownership* exists. Beside state property, we may find co-operative property, state property used (on lease) by groups of entrepreneurs or individual entrepreneurs, a combination of the state and co-operative forms (e.g. in the case of small co-operatives established within a state enterprise), partnerships of co-operative and state enterprises, partnerships of private persons, and finally, the private sector. Consequently, socialist economy *cannot be conceived as a simplified model of which the pure case or the monopolistic role of state ownership is characteristic.*

4. It follows from the above paragraph that the different economic formations are to be widening the range of choice both for producers and consumers. Cousequently the changes could and should have a favourable impact on the shaping of the *democratism* of

social life and on a strengthening of proprietor's consciousness. This widening choice enhances the general well-being of people.

5. The current organizational changes weaken the market positions of (big and small) enterprises enjoying a monopolistic position and intensify the chances of bringing about competitive markets. Part of the undertakings may be acquired within the framework of public competitive biddings (auctions).

6. The emergence of small-scale businesses and of various work-groups means an alternative for people confined in the traditional system of the division of labour, who may thus partially get rid of alienated labour, at least in certain fields. (For instance, a monotonous part-work done on an assembly line contrasted with a complex activity in some service field.)

The process of decentralization and the increased possibilities of undertaking may not only have their benefits, but also become the source of partly foreseeable, partly non-predictable disadvantages and strains. (For example, a much wider differentiation of incomes may be the source of such strains.)

Changes in management practice

What changes are observable in the behaviour of Hungarian industrial enterprises and of their management in the wake of the changes having occurred in the last 2 or 3 years, and particularly since 1980?

The most striking change is an increasing *orientation towards the world market.* It is above all the enterprises operating with a large export share that start in elaborating their development policy from an analysis of the world market, from a prognostication of the evolution of various regional and commodity markets.

Many of enterprises conduct analyses of the productivity levels and specific inputs of their foreign counterparts. The so-called *productivity partnerships* based on a voluntary participation of enterprises have proved to be a good method for exchanging experiences among enterprises. These are regional associations and thus overcome the disadvantages following from sectoral isolation. The partnerships aim at pooling forces in the interest of jointly elaborating methods serving a reduction of inputs and an improvement of quality and at handing and taking over experiences that have proved good. Greater awareness is now evident in the search for foreign partners ready for co-operation. This follows from the recognition that not only competitors exist on the world market; competitors might also become partners if such complementary activities are identified as bring additional benefits to both parties.

The enterprises have become more sensitive to costs and prices. The management teams have elaborated saving programmes, in which endeavours at minimizing inputs are already in evidence. A great many enterprises employ the method of value and function analysis. In minimizing inputs, ever more intensive endeavours at raising sales prices, above all export prices, are experienced.

On the other hand, as buyers they engage in tougher price bargaining than previously. Abroad they avail themselves more frequently of the possibilities of tactical purchases; whereas at home they don't accept, the offer price they consider as unfavourable as a "thing given".

Strategic planning

The changes taking place in the style and character of management are characterized comprehensively, in a planned economy, by the prevailing philosophy and practice of planning.

As is known, the breaking down of national economic plans to the economic unit level came to an end in 1968. Essential modifications were effected in the methods of national economic planning, too. Planning changed over to the application of a system reflecting the whole economic activity of, and the related uses by, society, and the indicators in physical units have ceased to be of primary significance in planning. The economic processes, goals and means are expressed by a combination of indicators in terms of value and in physical units, the scope of money and income indicators expressed in current prices has expanded essentially, and so on.

The new planning system of the national economy did not show an unbroken development in the decade of the 70s: the old planning methods returned in practice in either an overt or a covert form. What is more, while from the mid-70s on the evolution of objective economic conditions called for a strengthening of flexibility, the *improper, uncomplying interpretation of systematical planning* revived again to some extent. (A greater role began again to be played by objectives in physical units, administrative methods etc.) As a consequence, contradictions increased between the practice of planning and the objective requirements raised towards it.

As a result of examinations carried out in the late 70s, significant changes have taken place in the economic policy practice, including also planning from 1979 on.

While planning is *one* of the main instruments of the formulation and implementation of economic policy, the system and methods of planning have, from time to time, to be adjusted to the changing conditions and to the new tasks. The planning system must become suitable for the interpretation and acceptance of the new phenomena.

The fast change of world economic conditions, the country's sensitivity to foreign trade and its relatively heavy dependence on weather conditions, furthermore the increasing difficulties of foreseeing concrete changes raised towards planning and towards plans the requirement of their being *open* to, and receptive of, changes and of not hindering but promoting a flexible and active adjustment of the economy. An "open" plan implies, by its nature, a constant readiness for changes.

Planning and plans must, furthermore, promote that qualitative characteristics of economic development come to the fore.

The uncertainties of economic processes and conditions strengthen the demand for planning *in alternatives.* Planning in alternatives means the elaboration of variants being on the same footing and consistent by themselves.

The directives issued by the president of the National Planning Office for the 6th medium-term enterprise planning [6] already reflect this more up-to-date concept of planning. It is declared in them that ". . . the plan is of a flexible, open nature, which permits an inclusion of necessary changes . . . The contents of enterprise plans should be formulated flexibly, in a differentiated manner in the function of the time horizon of the plan, concentrating on the fundamental goals and tasks, and . . . in consideration . . . of probable and possible errors it . . . is expedient if an enterprise plan concept is drawn up in several versions."

The standard of enterprise planning has improved in comparison to the previous medium-term planning period, and primarily in the enterprises which have for years been participating in the experiments designed to streamline medium-term enterprise planning. These include the big enterprises, too, which are regularly involved by the central planning organs in the elaboration of some development concept.

In the first place these are the enterprises which base their medium-term plans on *enterprise strategies.* The strategic way of thinking is a relatively novel phenomenon and it has got established with a relatively small number of enterprises. True, these are in fact the best ones. Their leading executives are of the view that the enterprises which have no ideas about the future will probably have no future at all.

According to my experience strategic planning, the formulation of concepts outlining long-term future, has become an integral part of the system of management instruments in several industrial enterprises. The management of these enterprises have recognized that strategy, a well-identified strategy, is a competitive factor, and in a period of accelerating structural development it cannot be dispensed with.

The circle of enterprises here spoken of carry on their planning work with the participation of outside experts, some of them even avail themselves of the services of foreign consulting firms. These enterprises – just because they take much care of modernizing, streamlining their strategies, "roll on" year by year their medium-term plans, too. They draw up also their annual plans so that they include an outlook for 1 or 2 years ahead.

Under present-day conditions the elaborators of enterprise strategies have to seek an answer to the question about the scope of functions that the enterprise can attend to competitively without an excessive deconcentration of resources, about the particular advantages and peculiar forces the enterprise is in possession of. While previously the basic issue of growth-oriented enterprise strategy was a *sharing* of risks by diversification, in our days it is a *minimization* of enterprise risk that comes to the fore in strategies.

In this connection an identical role with expansion is played in development policy by *abandonment,* by the identification of the *areas* and *modes* of divestment.*

*"Any enterprise needs . . . a systematic abandonment policy at all times, but especially in times of turbulence . . . in turbulent times, an organized sloughing off the past combined with a systematic concentration of resources are the first requirements of any growth policy." [1 pp. 43, 46].

Part of the Hungarian enterprises have realized that a preparation for abandonment ties up considerable human, managerial, organizational, financial, technical and market resources, and that abandonment *disengages* resources only if it is prepared systematically and the related actions are concerted. Divestment caused disappointment to many an enterprise, because it came up against considerable resistance, the disengaged capacities could not be utilized, the market renown of the enterprise became impaired etc. The cause of all this was that management decided haphazardly, or under the constraint of the moment, on the abandonment of some activity.

In all probability, larger is the number of enterprises where planning work does not comply everything with the novel requirements. In planning even today routine work, the making of charts, "paper technology", and the way of looking at things "in kind" is still massively in evidence. Since in planning the elaboration of an enterprise strategy and the ways looking at things in strategic terms have not yet got established, that is to say, in planning a technical approach to goals is dominating, the planning of value processes also plays, with many enterprises, a secondary role.

For a good number of enterprises it is not clear what should be understood by strategy; which are the goals and means (methods) that are of a strategic nature; for what period it is expedient to formulate a strategy etc. It is necessary to clarify moreover, also some general issues of making a strategy, e.g., whether in a country with planned economy the elaboration of an enterprise strategy (mainly that of big enterprises) can be made the responsibility of the management only and in what measure, and whether it is not justified to call into being a body, a board, with the participation of all those economic management organs, banks, and possibly main users, which exercise an impact on the activity of a given enterprise.

The setting up of committees of management (boards of directors) or an extension of the sphere of authority of the boards of supervision might possibly contribute to the solution of the problem, although lots of novel questions would be raised by the functioning of these (whether they should be advising, supervising or decision-making bodies; whether this would weaken or strengthen the responsibility of enterprise management; who should bear the responsibility if the strategy does not work: the enterprise, the bank, or possibly the state budget, etc.?).

The enterprise plan concepts already include prognoses, too, but often it is not manifest, *what* enterprises *base* their *prognoses on.*

The examinations relating to enterprise planning leave no doubt the fact that part of the enterprises still continue planning "upwards", wherefore planning is not free from the relevant tactical considerations.

It is a matter of fact that today there are not yet fully developed methods available for treating the factors of uncertainty, we are still behind in the elaboration of methods of prognostication, particularly those of price prognoses. It is believed to be one of the methods of protection against uncertainties that plans are drawn up in physical units which can more exactly be taken account of, and it is with them that value indicators are co-ordinated; the goal of enterprises expressed in the plans is often just to continue in

existence and to score an "average" development. The measure of their efforts is determined to a considerable extent by the satisfaction of expectations in relation to wage and income increases and to social policy.

A good number of enterprises stand, consequently, for cautious planning. Therefore, from the current medium-term plans of part of the enterprises conclusions can be drawn with reservations only as to their real intentions, aspirations and expected behaviour.

Decentralization of spheeres of authority

The duality experienced in the system of planning (this is said of course with some slight simplification) is characteristic of the enterprises' *internal management* system, too. With part of the enterprises a process has begun with a view to transforming, streamlining the internal management system. The fundamental tendency is to decentralize the spheres of authority. The intention is to develop such enterprise organizations and management systems as facilitate response and self-adjustment to the new and often unexpected environmental impacts. In many instances the decentralized units are formed so as to become suitable for a clearcut identification of the individual product markets, of the clientele and of the competitors.

A number of enterprises have elaborated comprehensive and far-reaching programmes of organization and management organization. These set out from the future tasks, functions (strategy!) of enterprises. What is the motive of such actions? Summing up the individual cases, the following can be drawn as conclusions [7].

External motives:

– changes in the control system of the national economy and their expected trend;
– behaviour of the co-operating partners;
– evolution of competitiveness, changes in market positions, and potential possibilities that can be forecasted in this context.

Internal motives:

– expansion of the sphere of activity of enterprises;
– increasing sophistication of the processes of management and implementation;
– clearcut separation of the decision making authorities;
– improvements in the preparation and harmonization of decisions;
– improvement in harmony among planning, carrying out and measuring performance;
– making unambiguous the direct and functional management, and definition of its scope of operation.

The internal management system of the big, *vertically* organized enterprises is mostly based on the broken-down plan. Measurement of the performance of vertically connected factories is – in want of a market price – rather difficult. The formation of internal transfer accounting prices gives cause for concern, particularly when such manufactures are at issue which practically do not participate in market circulation. The

internal price formation has a fundamental role in the development and modernization of the internal mechanism of enterprise, since this is an indispensable condition of measuring the performance and economic efficiency of the individual economic units. This is all the more important, because in want of an objective measure it may be risky to decentralize the spheres of authority.

The enterprises with vertical organization endeavour to avoid bottlenecks and wage differentiation among the factories. Therefore the incentive funds are usually not decentralized and thus no consequence attaches to their evolution within the factory. Consequences are entailed on the other hand, in addition to the plan's fulfilment in physical terms, by such aspects as gross profits, the programmed character of operations, the evolution of stocks, or the fulfilment of exports. A number of vertically organized enterprises have introduced *competition for the development resources.* It has been borne out by experience that if factory investment is tied by the enterprise to requirements of return, the appetite for investment decreases at once and factories make greater efforts at disclosing their reserves. In a number of vertical enterprises it is also possible for a factory to decide on its own on the mode of fulfilling its production task (for example on whether it is more expedient to use intra-enterprise co-operation or an external one promising to prove more efficient).

In the *horizontally* organized economic units decentralization of the spheres of authority is more massively in evidence, because the performance of the individual units can be measured with greater safety. (The cost centre can be identified in a more clearcut manner and prices may also reflect the market value judgment.)

With a great number of enterprises the endeavour is to develop the producing units into complex "profit centres". The goal is to have also factories operate according to the rules of enterprise profit motive. In certain cases the establishment of so called business circles is urged, in which the unit, or its head, takes care of the career of the manufacture from development to marketing. An amalgamation of responsibilities for the product and for the result is characteristic of such experiments. Occasionally it is up to the factory manager to decide whether he establishes production cooperation with the sister factories or with other enterprises.*

As against the internal management system based on the breaking down of plans it is by all means an advantage that in these enterprises bargaining about the plan is

*I note here that today a great many agricultural cooperatives employ already the method of in-farm contract-based production with success. The essence is that, applying the principle of the division of labour, the management of the cooperative puts some small group in charge of carrying out a complex task. They come to terms on what payment will be given for the work. The means necessary for the work are put by the cooperative at the small group's disposal at market price, i.e. within the big enterprise the individual sections carry on a real management of their own and have a substantive share in the management of production, in the shaping of their own working conditions. Beside the economic advantages that can be evinced directly, this method enhances the members' feeling of being proprietors and increases the democratization of decisions.

eliminated; the evolution of financial funds depends (fully or partly) on the work of the given unit (it is not possible in such cases to address references "upstairs").

Experiences suggest that decentralization or the streamlining of the internal management system can perhaps take years to complete. The fact is that modernization has such personnel, organizational, material and technical conditions as cannot be created from one day to another. Particularly the *personnel* conditions are difficult to create. It is enough to think of the fact that the majority of enterprise medium-level managers have carried out their work on the basis of instructions, their main task having been to have production goals fulfilled. A knowledge of economic regulators, a consideration of their impacts, have not formed part of their "jobs", just the same as neither have market experience or entrepreneurship.

It is thus easy to understand that a modernization of the internal management system of enterprises needs to be coupled, above all, with the training of local (e.g. factory) executives, with the formation of their attitude.

An indispensable condition of the modernization of the management system is to win over the interested local executives, including the heads of social organizations. There are also experiences indicating that in recent years there has been a decline, in some instances, in the standards of the heads of units forming part of major enterprises. This can be accounted for by the fact that the medium level management function restricted by narrow limits and "degraded" to the executors' level did not attract talented, efficient people. If, as a consequence of the modernization of internal management methods, this executive function gains in content and becomes of a creative nature, this situation can be expected to change to advantage.

Modernization of the internal management system of enterprises raises sociological problems, too. The fact is that decentralization of the spheres of authority, the sharing of responsibility, is a challenge to the traditional enterprise hierarchy, to the established power relations grown rigid for years, particularly if decentralization is accompanied by a democratization of management and administration.

The internal management system of enterprises has and can have a certain self-movement, but in its main tendency *it cannot be broken away from the de facto practice of economic management.* If enterprise auotonomy decreases, if frequently changing "expectations" must be met, if dependence on resources (e.g. being at the mercy of the supplier) increases, all this will leave a mark on the system and style of internal management, too. If an enterprise is, infact, a part of a vertical management hierarchy, this will be reflected in the internal management system, too. (This is to account for the fact why in the past the internal management systems and structures of enterprises were practically identical.)

The rate of modernization of the management systems is unsatisfactory. In the majority of enterprises the sphere of authority to make decisions is *overcentralized* even today; the organizational system is fairly inflexible, and hierarchy is highly articulated. "In the 70s the state-owned industry was characterized by excessive centralization and by a low level of the mechanization of intellectual activity", this is what was stated by a

study of the Central Statistical Office [8]. In accordance with this – reads further the C.S.O. report – the management and administration tasks within the enterprises are, in general, attended to by multi-stage organizational units establishing with one another extensive vertical and horizontal relations. As a result of centralization, the number of top-level executives is relatively low in comparison to that of medium-level executives. The ratio of top management (managers, heads of department) to medium-level management (heads of section, supervisory management) is 1 to 5. The existence of an articulated hierarchy is indicated also by the fact that the proportion of non-independent executives (heads of subsections, groups) is almost identical with that of superintendants (shop-foremen, heads of technical, accounting and other clerical subsections, groups).

The overwhelming majority of our industrial enterprises are multi-plant organizations. The number of establishments per enterprise increased by one and a half times between 1960 and 1980. The average number of establishments is 6 for light industrial enterprises, 8 for engineering industrial enterprises, 9 for building materials enterprises, and 10 for food industrial enterprises. There are also enterprises which carry on production in 10 to 20 plants. Considering their functions, technologies and market orientation, a great part of these plants are separated from the other units of the enterprise. Despite this, they have but a minimum autonomy in conducting their own management.

According to a survey analysing the situation of enterprise units located in the provinces [9], the majority of the executives interviewed feel that they are involved to a lesser extent in the management of enterprise affairs than would be justified by the economic significance their units account for within the enterprise. In fact, enterprise headquarters keep control over practically all elements of management and administration. It was complained by leading executives of surprisingly many industrial plants that they did not know enterprise goals and that the lack of an enterprise concept made it impossible for them to draw up plans for their own factories. Summing up: a great part of the leading executives of industrial plants located in the provinces are of the view that their role is not reflected satisfactorily in the spheres of authority delegated to them and in the extent to which they are involved in the decision mechanisms of their respective enterprises.

Questions, answers, dilemmas

The question can be put with good reason: As a result of the changes having taken place in environmental conditions and in the economic institutional system, why haven't more radical changes come about in the system of enterprise management? Why is the picture so heterogeneous?

The explanation can be given, above all, by the paradoxical situation which can be characterized by the far-reaching changes having taken place within a relatively very short time. The modification of course in economic policy and the changes occurring in the institutional system of the economy have extremely *accelerated the change of environmental factors for enterprises.* In such conditions those enterprises have, above all, been

capable of self-adjustment which were in possession of a strategy open towards the environment. The others follow those which have taken the lead with major or minor lags. The changes occurred have had a shock therapy effect: while animating some, others have become paralyzed.

It is a fact that the evolution of undertakings is not smooth enough. It may also be instrumental in this that with a view to improving market equilibrium the state budget centralizes an increasing proportion of enterprise incomes. In consequence, the enterprises' income position may be impaired. Consequently, while in the interest of a better adjustment to the market the requirement of running risks is being enhanced, the increasing centralization of incomes reduces the *possibility* of bearing risks in reliance on previously accumulated incomes. It must be added here that the practice so far followed in the centralization of incomes has made no differentiation between enterprises with *possibilities* for dynamic development on the one hand and stagnating ones on the other. The massive centralization of incomes has also narrowed down *credit sources.* I agree with the economists who have come to the conclusion that it is to be clarified as soon as possible: a decentralization of what proportion of incomes is *required,* or a centralization of what proportion can be *borne* by the operability of the current economic mechanism [10].

Speaking of the causes of differences experienced in the standard of management it must be mentioned that perhaps just under the effect of shock therapy neither the state economic management organs followed a consistent enough practice – at least in 1980. While in certain areas they eased the conditions they had established, in other cases they interfered with the management of enterprises. These circumstances did not have a favourable impact on the renewal of enterprise management.

We have every reason to suppose that the actions mentioned are just concomitants, "birth-throes" of the period of transition connected with the modification of the growth path and that the practice of economic control and management will adjust itself to the principles declared. (A sign indicating this is the raising of credit interest rates etc.)

It needs mentioning in this context that a remnant of the system of directive planning: "incrementalism"* i.e. to attain an increment against the baseyear, is a characteristic feature of managerial behaviour even today. This attitude follows from the dependence on, and the state of being imbedded in, the hierarchic management machinery, furthermore from the organizational system and decision mechanism within the enterprise. Moreover, the recurrent phenomenon of bottlenecks (forced substitution) also contributes to the existence of "incrementalism" [11].

"Incrementalism" has historical roots, too: in the system of directive planning the only measure of performance, of success, in a market fundamentally of an autarkic nature and lacking even internal competition, was a comparison of development (growth) to the past period (or to the plan). This "conditioning" can hardly be removed fast from human mind. Naturally, a comparison to the past can, in fact, not be eliminated, but today it is

*Other authors use the term "basis principle".

no longer the only measure and, mainly, not the most important one. And chiefly, it is not permissible to connect any interestedness (incentive) with it.

"Incrementalism" has today two concrete – consequently alterable – causes. One is the system of *wages control*, which calls for a steady development (increase in profits), and the other is disaccord between the orientation of the whole of the regulatory system (which puts capability of making income and profitability in the foreground) and the operational practice of regulation: i.e., *a frequent and relatively large-scale modification of regulators.*

These circumstances are in contradiction to interests attached to a mobilization of enterprise reserves, to making sacrifices in the interest of the future, and to undertaking knowingly any transitory decline of profits or of profitability. An "average" manager is interested in a reliable assurance of the prevailing (annual) "average" growth. It is not incidental that enterprise managers pass the toughest criticism just on wages control. (The system of wages control is, by the way, in sharp contrast also with the fluctuation of profits necessarily entailed by the price mechanism.)

The effect of economic (price, rate of exchange etc.) and organizational changes, radical and pointing forward in nature, can – *ceteris paribus* – unfold with the passage of a certain time only. The duration of this time is influenced partly by factors independent of us (e.g. the situation of world economy) and partly by those dependent on us (e.g. consistent application of the declared principles – normativity, differentiation etc. –, establishment of an expedient course of development policy, making society accept the economic policy endeavours etc.).

It is hard to judge how the *age composition of enterprise executives*** and its changes influence the behaviour of management. It is a matter of fact that the average age of executives continued to increase between 1974 and 1979, by one and a half years. The average age of general directors, directors and their deputies rose from 45.8 years to 47.2 years, and a remarkable increase – from 57.8 per cent to 62.4 per cent – was scored by the proportion of executives older than 45 years [8]. This indicates that a great part of the executives, appointed young in the years following World War Two, are still active even today and that a replacement of generation on a wide scale can only be expected in the years to come.

In Hungary the *mobility of executives* is relatively low. This has such objective causes as the relatively overcentralized structure of industrial enterprises (occasionally, an industrial enterprise represents a whole special line), the location conditions of industry, the situation of infrastructure (housing etc.), high professional specialization, and last but not least the social judgment which sets greater value on "loyality", on being a member of the "established staff", than joining some other enterprise offering greater possibilities for displaying individual faculties. According to the statistical survey already cited [8], in the state-owned industry every second executive in leading position has worked for over

**General managers, managers and their deputies, chief engineers, chief accountants, heads of department and their deputies, heads of independent sections.

15 years with his present enterprise (while among the subordinates this holds good for every fourth employee only). It is worthy of note, on the other hand, that among the executives the proportion of employees having joined the enterprise within the last five years is highest (25 per cent) just on the top level. It is a matter of fact that *mobility, replacement has brisked up* massively in the positions of general directors and their deputies. The majority of new top executives are appointed "from outside", that is to say, the number of "indigenous" executives, is relatively low.

The subjective conditions of management are essentially dependent upon *selection* and the *system of interestedness* (incentives).

The top-level executives of enterprises are appointed by the founding organ. Selection takes place on the basis of a triple criterion: political and moral expectations, professional qualifications (to be documented also formally), and leadership ability, quality. In addition to these, lots of *informal* factors can also play a role in the appointment.

In the present conditions the political requirement raised towards excutives is first of all related to improving the competitive position of the enterprise. Next to the political and moral requirements, in the selection the appointing organs put the emphasis on the examination of professional qualifications. This is a criterion appearing objective and is practically measurable. The examination of *aptitude for leadership* (gift for organization, communication, bent for entrepreneurship, receptivity for changes) is, on the other hand, somewhat pushed into the background. Unfortunately, this examination is often not carried out even after putting the executive in a given function. In consequence, competition between the executives actually filling functions and the potential executives is restricted to a narrow domain. The founding organ rarely has recourse to *quality-motivated replacement,* which would not necessarily be warranted by an unsatisfactory performance of the executive in function. A replacement may be justified also by a change in environmental factors, which may occasionally call for *leadership styles and types of executives* different from the previous ones. Other – or partly other – leadership qualities have been required by the fast-rate, relatively safe economic growth of fundamentally extensive type, and again other ones are necessary in the period of slow growth characterized by a large-scale saving of resources and considerable factors of uncertainty in the intensive type of economic growth.

In the debates about the system of selection of executives the following issues have been raised: whether it would not be expedient to allow a greater role to the boards of directors or supervising committees possibly to be called into being; whether it would not be expedient to extend the system of tenders and to conclude a contract for a definite term with the executive on his appointment, etc.?

The rating and role of executive functions, furthermore a consistent and balanced enforcement to the criteria of executive selection depend, among others, on whether the state administration type representation of the *proprietor's function* can be replaced by proprietors' organizations based on *real economic* interestedness [3].

Because of its objective situation, a supervisory authority considers other viewpoints in the selection of executives than an income-conscious proprietors' organization *having direct interests* in an efficient utilization of resources and *running the market risks.**

The complex economic *supervision* of the activity of enterprises, or of executives, is a disputable question. This supervision occurs everywhere throughout the world in the interest of the proprietors and serves the purpose of finding out how executives administer the property they have been put in charge of. With us it is just the proprietors' (i.e. complex economic) supervision that appears not to be efficient enough as it is carried out by the supervising authorities, i.e. the organs which appoint and relieve the executives, give instructions to the enterprises etc. Thus a certain association for the protection of common interests gets established between the supervisory authorities and the enterprises, which hinders, of necessity, an objective judgment of the work of management. No seperation is made with in the controlling authorities between the authority function and the responsibility for managing the economy.

Therefore, it would be justified to *separate also organizationally* the complex supervision of enterprises from the function of superintending. It is proposed – as a possible solution – that the complex supervision of economic units should be seen to by inspectors independent of both the enterprise and the founding authority [12].

The average wages rise parallel with the levels of assignment, however, even in the top executive category they are only three times as high as those of the clerical staff representing the lowest level. The wages of medium-level management are in general the double of the average wages of the lowest category, while those of the foreman level exceed the latter by hardly more than one and a half times. It is contestable whether such a small-scale differentiation is in proportion with the differences in responsibility. The fact is, namely, that the average monthly wage of the medium-level management amounting to 5–6 thousand forints corresponds by and large to the monthly wage of an outstanding skilled labourer, and this is hardly exceeded by the average monthly salary of the top management amounting to 7–9 thousand forints.

In addition to their basic salaries, executives earn in three forms personal incomes from enterprise sources, and these are: the year-end share, the bonuses tied to the fulfilment of yearly premiated tasks, and the complex reward based on an evaluation of the executive's activity all through the year. However, it acts greatly paralyzing on an unfolding of management autonomy and creativity that in awarding the bonus, and particularly the complex reward, subjective viewpoints are in evidence, which greatly increase the exeutives' dependence on the supervisory authority.

*The establishment of entrepreneurship-type income-conscious proprietors' organizations would help overcome also the contradiction which currently exists between the responsibility and sphere of authority for decisions of the organization filling the function of proprietors' representation (ministry, council) and the right (and possibility) – in the hands of others – of actual disposition over the resources.

"... the evaluation, while aiming at complexity – said a general manager – is restricted in fact to a mechanical examination of the individual viewpoints ... this system of evaluation is not quite as it should be, as it is extremely of a practicist nature and serves for a short term, and finally because it curbs productive capacity ... the "ceiling on interestedness" means automatically also a "ceiling on performance" [13].

It is still to be mentioned, that *institutions and firms providing management services* are a bottleneck in Hungary. No specialized domains of management consultancy have developed, consequently the executives are obliged to rely mostly on themselves and their own staff in their work of strategy formulation, planning, organization, establishment of information systems, market organization etc., all requiring a lot of special knowledge. The majority of the existing institutes are of a sectoral nature, therefore not even a competition could develop among them, and a considerable part of their activity has been used up in providing services for the sectoral ministry.

The reorganization of these institutes is envisaged to be carried out soon. The entrepreneurshiptype development of management consulting and engineering activity is in progress, just as in the creation of possibilities of establishing new, partly small-scale, enterprises.

*

As can be seen, the phenomena put under criticism exist *within the framework of a fast changing and adjusting economic and management system.* Perhaps their recognition will also be accelerated, if at all, by the same. However, the risk and responsibility entailed by changes are increased by the economic situation of the country and the social and political sensitiveness connected with these changes. Therefore, the decisions designed to solve the problems raised surpass in many cases the scope of economics and management; they already fall under the competence of political leadership.

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УПРАВЛЕНИЕ В УСЛОВИЯХ БЫСТРО МЕНЯЮЩЕЙСЯ СРЕДЫ

Д. ВАРГА

На мировом рынке развертывается конкуренция не только продуктов технологии, но и соревнующихся друг с другом методы управления предприятиями и экономикой, сложившиеся в различных странах. В отношении методов управления предприятиями восьмидесятые годы привели в Венгрии к третьей в послевоенной истории страны большой волне изменений, быть может, более глубоких, чем хозяйственная реформа 1968 г.

В статье при рассмотрении макроэкономических взаимосвязей этих изменений указывается, что структурная адаптация, преобразование структуры не может ограничиваться лишь изменением производственной структуры, ассортимента выпускаемой продукции. Это лишь один из компонентов. Преобразование структуры должно включать в себя также и обновление качественного и количественного состава затрат, рыночной политики, институциональной системы народного хозяйства и системы руководства и управления предприятиями. В связи с тем, что в 80-ые и 90-ые годы поле деятельности экономической политики сужается, возрастает роль применяемых экономической политикой методов и институциональной системы. Вследствие сужения поля деятельности экономической политики большее значение приобретает способность и готовность микросферы к маневрированию.

Автор излагает организационные изменения, происшедшие в 1980—1981 гг. в Венгрии как в институциональной системе народного хозяйства, так и в отношении предприятий.

Началась ликвидация чрезмерно больших и, в первую очередь, горизонтально функционирующих организаций. Наряду с сохранением государственной монополии внешней торговли свертывается монополия внешне горговых предприятий, и в этом аспекте расширяются возможности выбора продавцов и покупателей. Становятся возможными новые формы предпринимательства. В результате всего этого становятся более благоприятными условия выбора формы предприятия или организации, наиболее соответствующей и согласующейся с характером деятельности и природой рынка.

Автор анализирует развитие планирования предприятий, его приспособление к новым условиям, уделяя при этом особое внимание открытости плана и альтернативному планированию. Раскрываются тенденции развития внутренней системы управления предприятий в направлении децентрализации компетенции, а также противодействующие этому факторы. Внутренняя система управления предприятий обладает определенным самодвижением, однако с точки зрения главной тенденции она не может быть оторвана от фактически существующей практики управления экономикой.

В статье анализируются условия, которые и в настоящее время препятствуют в Венгрии выявлению резервов предприятий. В этом важную роль играют система регулирования заработной платы, частые пересмотры экономических рычагов и — вследствие этого — система оценок, исходящая из «достигнутого уровня».

В заключительной части статьи рассматриваются вопросы, связанные с возростным составом, мобильностью, отбором и заинтересованностью руководящих работников предприятий. Автор указывает, что изменение факторов окружающей среды оказывает влияние также и на стиль руководства. Одни качества требуются руководителю в условиях высоких и в основном экстенсивных темпов развития, представляющих собой относительно стабильное экономическое развитие, и другие в период медленного и в основном интенсивного развития, при экономии ресурсами и наличии большого фактора неопределенности.

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ORGANIZATION OF LARGE INDUSTRIAL ENTERPRISES IN HUNGARY: A COMPARATIVE ANALYSIS

This paper gives an account of an empirical analysis of organizations conducted by the authors in sixty large Hungarian industrial enterprises. The theoretical background of the analysis lies in the contigency theory of organizations, according to which the analysis of enterprises is carried out by the description of environmental and inside characteristics, strategy, structure, behaviour of participants and of organizational performance, followed by an analysis of their interrelationships.

The study relies mainly on approaches developed by the Aston Group (England) and by Polish researchers. After theoretical and methodological articles published in Hungarian periodicals, the authors give a first account about their empirical research findings.

The article analyses those elements and connections of the system which are in the foreground of Hungarian organization development activity. These are the impact of the size of an organization on its functioning and the development of the mechanism of company management systems.

In October 1979, the Department of Industrial Organization at the Karl Marx University of Economics, Budapest, began a comparative analysis of the organization of large Hungarian industrial enterprises.* Within the framework of this task, we conducted a survey based on questionnaire at sixty large industrial enterprises and made controlling interviews at sixteen of these companies. With the help of the Computer Center of the Ministry of Finance, we have made a general overview of the data, the results of which are published here.**

We are *in the first phase* of analysing the data obtained. Our primary objective is to give a proper description and interpretation of the organization of large industrial enterprises. This is rather important because every organization development policy must be based on a clear understanding of the organizations to be formed.

In the centre of these questions is the organization structure of enterprises. The person engaged in organization development is faced with the question why an organization behaves the way it does. Only after discovering the answer may we get a solution to the problem of *where to intervene in the system in order to realize another way of functioning* (flexible, innovative, performance-oriented).

Our starting point is the assumption that the behaviour and performance of enterprises are directly influenced by the structure of management. The organization

*In this work besides the authors Zoltán *Kishalmi* and Péter Ákos *Bod* also took part.

**Using mathematical-statistical methods, we have received help from Ágnes *Matits*, László *Füstös*, József *Temesi* and György *Mundruczó* (Karl Marx University of Economics), and László *Cserjés* (Computer Center of the Ministry of Finance).

structure of enterprises may be evaluated and developed in many ways and during the last years one might have met with many different approaches to structure in the Hungarian literature. Structure is used for indicating the structure of enterprises within the national economy, that is, the (quantitative) ratio of small, medium and large companies. The traditional German *betriebswirtschaftliche Organisationstheorie* – and in its wake, a part of Hungarian literature and organization theorists – use the expression organization structure in the sense of configuration (setup), not distinguishing between the structure and the outside form of an organization. According to Sárközi: ". . . there is an economic side to the problem: What is the relative optimal size of companies in different branches of the economy . . . The legal side of the problem is: What types of organizational forms are to be suggested for large and small enterprises? " [1]

The examples mentioned above clearly show the differences observable in using and interpreting the expression "organization structure". *In our concept, structure means the relationship between the elements of organization.* Our approach is different from that of the above mentioned ones and its further characteristic is that it concentrates on the structure of management. When dealing with organizational problems in Hungary it has been left out of consideration that *structure has a central role* in the discovery of the way an *organization functions.* These approaches were not free from unjustified highlighting of certain factors influencing the activity of organizations. These days, the *size of the company* and the *"inside mechanism"* (recording and incentive systems) are attributed extraordinary importance in the analysis of organizations. These are rather restricted approaches as both variables are *inside characteristics* of organizations.

It is necessary to analyse structure *in a broader context* because organization structure is a result of many *external and internal* influencing factors and, furthermore, most of the pressure for the development of structure comes from the environment. This approach is in accordance with the nature of organizations and only in this way will it be possible to raise really important questions.

Our model for the analysis of organizations has been constructed according to the above considerations. Analysis of relations between organization and environment is not only a practical need, it is also in accordance with the results of organization theory and management science.

One of the basic changes in the study of organizations between 1960 and 1980 is replacement of the *closed-system approach by the open-system view.* With this change, the analysis of relations between organization and environment has become an *essential* part of organization studies and organization theory has integrated environment into its field of interest [2, 3, 4].

The second factor in the theoretical changes is that organization theory has given up the search for "the only best way" and instead of supposing the homogenity of organizations it stresses their heterogenity. The third characteristic change is the supplementation of a restricted one-science-based approach with the problem-oriented point of view [6]. And finally, mathematical modelling is complemented by socio-economic model experiments [7].

The changes mentioned have affected also the Hungarian scientific community. Instead of the traditional "theory of organizing" these days "management and organization theory" is used in academic committees. Increasingly often can one hear about independent organization theory, reflecting the fact that many organizational phenomena, e.g. way of functioning, organizational behaviour and performance cannot be understood as a partial problem within an organization, but need analysis in the context of the whole organization.

Nowadays, the answer to the question *"Why has organizing activity reached only a low level of efficiency in Hungary? "* seems evident. *The reason is not simply the shortage of trained managers, organization experts or of techniques and the willingness to organize more effectively.* If organizing activity is on a low level, despite the endeavours of many enterprises and managers, then it is besides the point to speak about individual negligence, because behind such behaviour there must be a common reason rooted in the structure and the situation producing it. This may only be interpreted and understood in the context of the organization, discovering the mutual relations between organizations and their environment, and the way to change it. The conclusion drawn by Attila *Chikán* – after an analysis of the factors causing the high level of inventories in the Hungarian economy – is the same: "It is far from surprising then that studies on inventory control in enterprises . . . rapidly have laid stress on the relations between the enterprises and their environment" [8].

This article concentrates on those aspects of the relationships between organization and environment, which are in the foreground of the theory and practice of organization development in Hungary and which are rather problematic in our view. The two points in question are as follows:

(a) Size of organization determines the functioning and performance of enterprises. (Cf. the statement that "increasing size leads to increasing bureaucracy".) Decreased size thus results in more favourable functioning and performance.

(b) As the economic mechanism of the national economy can only be changed over a longer period of time, at present the task is to further develop decentralization, recording and incentive systems within large industrial enterprises – independently of the macro-mechanism.

Starting from these opinions, our aim is to test their validity on the basis of empirical data, and within that:

(a) to discover the real effect of size on organization structure. To verify the assumption that size is neither the only nor the decisive factor of structure (mainly with respect to centralization) and thus *changes in size can produce only limited results.*

(b) By examining separately structure, to determine the basic factors influencing it. To prove that centralization is a general consequence of dependence and in this way to show the theoretical and practical weaknesses of the so-called "concept of inside mechanism" (that is, development of decentralization, recording and incentive systems in themselves, leaving out of consideration the environmental influences).

Conceptual model and methods used in the analysis of large industrial organizations

These days the comparative analysis of organizations is getting an increasingly important role in the study of organizational behaviour and the discovery of structural features within enterprises. Surveys of large samples of organizations provide an opportunity to analyse connections between organizational variables, to discover similarities and differences, verifying assumptions on contingencies of structure and to make generalizations.

In our opinion, the comparative analysis of organizations – as a research methodology – has an organic relationship with case studies and monographs concentrating on a particular organization. These two types of methodologies are seen as complementing each other.

The concpet underlying our research used in the analysis of sixty large Hungarian industrial enterprises, relies mainly on results published by researchers at the University of Aston, Birmingham and the Polish Academy of Sciences' Institute of Philosophy and Sociology. In the centre of our analysis there is a multidimensional approach to organization structure. This standpoint rejects the "the only way" of forming organization structure. At the same time this research concept does not define *a priori* any decisive contextual element; only after analysing the empirical data will conclusions be drawn in connection with such structure-shaping elements as size of organization.

For the description of management structure of enterprises we used the following primary dimensions:

– centralization,
– configuration,
– differentiation,
– coordination,
– internal recording and the system of material incentives.

Centralization means the degree of delegation of authority, with appropriate decision-making process, within an organization. *Configuration* (as the formal shape of organization) shows the hierarchy of management, vertical and horizontal structuring of organization. *Differentiation* is concerned with different orientations and structural features of research and development, production and marketing. Under the term *coordination* we mean all the means, methods and organizational solutions designed for assuring coordinated functioning of organization units having different orientation and structure.

Internal recording and incentive system contain methods applied in accounting the performance of production units and the stimulation of collectives engaged in production.

Primary dimensions of organization structure were further divided into *elementary* variables. For example, configuration was characterized by the number of people or organization units subordinated to general directors and their deputies, by the number of departments within a central administration body, by the number of levels in the

hierarchy etc. When operationalizing differentiation we made a distinction among task-, objective-, time- and interpersonal orientations.

Contextual elements were divided into two groups:

(a) characteristics of environment (exogenous influencing factors),

(b) internal characteristics of organization (endogenous influencing factors).

Among environmental factors, we have analysed:

– central economic regulation (control and management) system,
– market environment,
– scientific-technological environment,
– labor market.

Within the internal characteristics of organization, we have analysed:

– field of activity, range and complexity of products,
– technology,
– type and system of production specialization and cooperation between production units,
– origin and history,
– size,
– location.

Characteristics of market environment describe e.g. monopoly or competition position of buyers and suppliers, fluctuation of demand, direction of sales (export or domestic market). The variables of scientific-technological environment describe the frequency of new scientific discoveries, new constructions and technologies.

Analysing the effect of the central economic control system we stressed variables describing *dependency* of organizations (e.g. percentage of sales realized at state-determined prices, ratio of income from obligatory sales, percentage of state financial assistance (subsidies and exemptions) to the volume of income etc.).

In our view, organization structure is not a passive, mechanistic consequence of contextual factors. Within socialist circumstances the equalizing effect of the economic control system and the "protected" position of enterprises make it possible for company managers to interpret the same environmental influences in different ways to leave out of consideration the pressures of the market (sometimes manipulating the environment) and to assert various preferences among possible structural solutions. This justifies our postulating an *intermediate* factor between contextual elements and organizational structure. This intermediate factor is called *organization strategy*, and its variables are approached through innovation.

The elements of organization strategy in our survey are the following:

– the goal system of product-structure,
– research and development strategy,
– dependency of innovation activity (on other organizations),
– participation in the international R and D,
– process of analysing environment and structure forming policy.

The existing form of organization sturcture influences the *behaviour of organization members* (job satisfaction, workers' general attitude, fluctuation, etc.). The behaviour of members – *together* with contextual and structural features – influences the performance of the organization, the efficiency of its activity. *Ecomonic performance* may be analysed by using balance sheet data, but is is reasonable to rely on other performance characteristics (e.g. quality, standard, innovative level of products, etc.).

Summarizing our approach, Figure 1 shows the conceptual model of analysing industrial organizations, and Table 1 describes the most important variables. Direction of arrows in Figure 1 indicate *possible relations between different variables.**

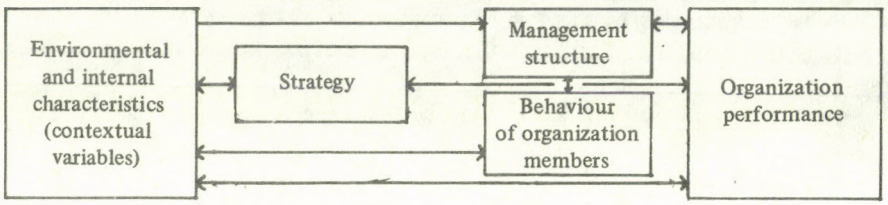

Fig. 1. Conceptual model for analysing industrial organization

During the research, the variables and their relationships were analysed by using mathematical-statistical techniques. The phases of data *collection, data-processing* and *interpreting* were the following:

1. Data collection

(a) Methods for choosing the sample

(b) Techniques for gathering data

2. Data processing

(a) Standardization of data (definition of measures, weighting, transformation of scales)

(b) Choosing the most important data, identification of groups of variables and of hypothetical variables (e. g. using factor analysis)

(c) Using descriptive statistics (general tendencies, deviation and distribution)

(d) Analysis of relationships (correlation, regression, path-, factor- and cluster analysis)

(e) Testing and verification

3. Interpretation of results computed

During the survey we measured elementary variables of the model by using different types of scales. We relied on both qualitative (nominal and ordinal) and quantitative (interval and ratio) scales, taking into account the necessary conditions for the application of certain mathematical techniques.

*Similar approach is published in [9].

Table 1
Groups of variables within the model

Environment	Internal characteristics	Strategy	Management structure	Behaviour of members	Performance
– Economic regulation (control) system	– Field of activity	– Objectives for product-structure	– Centralization	– Job satisfaction	– Profit volume
– Market environment	– Technology	– R and D strategy	– Configuration	– General attitude	– Profit related to income and assets
– Scientific-technological environment	– Type and system of production	– Participation in international R and D	– Differentation	– Initiative	– Value added
– Labour market	– Origin and history	– Process of analysing environment and strategy forming	– Coordination	– Fluctuation	– Quality of products
	– Size		– Internal recording and the system of material incentives		– Level of innovation
	– Location				– Standard of products

In the phase of data-processing – after getting a general overview of data, with the help of descriptive techniques – we applied factor analysis for discovering relevant and independent factors. Cluster analysis had a rather important role in typifying the sample and finding similarities among organizations.

The sample

The sample of our survey consists of sixty large Hungarian enterprises. They belong to the following four branches of industry:

- chemical industry: 12 enterprises
- light industry: 16 enterprises
- engineering industry: 26 enterprises
- food industry: 6 enterprises

All the enterprises analyzed are independent organizations in the sense that they are directly under the ministries supervising them. None of them belongs to trusts.

According to their size they are among the largest ones within their respective branch of industry. Average size of the sample, measured by number of employees is 6208. This average covers a relatively large deviation. The number of employees ranged between 1044 and 35108.

Connection between size and organization structure

In the following parts we present our main findings after the first analysis of the data.

(a) Four dimensions of organization structure (centralization, configuration, differentiation and coordination) show essential similarities, *independently of branch of industry.* Analysis of the *delegation of authority question revealed strong centralization.* This is reflected in the fact that out of 54 activities analysed, in the case of 40 activities, the general directors (the highest level in the hierarchy) and their deputies have the right to make decisions in most of the enterprises. Production units can decide only in five activities, mainly in the field of *manpower and wage control.* Production units generally provide data, make suggestions and comments within the decision-making process. *Departments within central management bodies also have limited independence in decision-making.*

Another sign of strong centralization is that decision-making rights are concentrated at highest levels on control not only in the case of strategic functions (e.g. planning, investment), but in all functions analyzed. Production management – which is generally seen to be a possible area of decentralization – is essentially also centralized. The picture described suggests *that delegation of authority has a rather uniform character and there is no distinction between strategic and operative functions from this point of view.*

Decision-making was analyzed in the following eight functional areas: planning, organization, development, marketing, materials management, labour force and wage control, financing and production management. All of the functions were further divided into sub-functions or activities (e.g. within planning long-range, medium-range and operative planning were distinguished). Decision-making was described for altogether 54 sub-functions.

Analysis of the decision-making system was not limited to the delegation of decision-making rights, but the *nature of participation in the decision-making processes* was also investigated. The following elements of authority were distinguished: direct coordination, decision-making, suggestion, commenting, agreement, data providing and supervision. Four hierarchical levels within the organization were analyzed: general director (director), deputy directors, departments within central management bodies (e.g. marketing, development, financing) and production units.

The survey has made it possible to analyze the following characteristics of decision systems:

– distribution of authority among hierarchical levels in case of a particular function,

– authority of a given hierarchical level with respect to certain functions and in general,

– independence of production units within enterprises.

According to our data, general directors decide on medium-range and annual *plans* in nearly every organization. Decision on operative plans is the right of technical directors in 29.1 per cent of the companies and of economic directors in 23.4 per cent. Planning is under direct coordination of economic directors in the case of medium-range planning in 47.9 per cent and in annual planning in 43.6 per cent of enterprises. Central departments take part in planning by making suggestions and providing data.

Production units make proposals for medium-range plans in 25.4 per cent of the organizations. Their role in planning is essentially limited to providing data. It is surprising that the proportion of proposals for plans by production units *is not higher* in the case of operative planning than in medium-range and annual planning.

Medium-range and annual plans for *organizing* activity are approved by general directors in nearly every enterprise. Their authority includes direct coordination in the organization of production and of management in 10.0 per cent of the companies. Production units can decide on the organization of production in only 10.9 per cent of the enterprises.

Decisions on *development* are made by general directors in 43.0 per cent of the companies. The percentage of decisions made by technical directors in the field of research is 47.2 per cent, and 54.5 per cent in product development. Supervision of prototypes is provided by technical directors in 60.0 per cent and direct coordination of research and development is their responsibility in 30.9 per cent of the enterprises.

Economic and marketing directors are in connection with development decisions mainly by making suggestions and comments.

Marketing departments provide suggestions for development decisions in only 34.5 per cent of the enterprises.

Production units have the possibility for making suggestions in connection with research in 21.8 per cent, with production development and investment in 40.1 per cent of the companies.

In the field of *marketing,* general directors have an important role in making longe-range contracts, in taking orders for export sales and in deciding on prices. Technical directors generally make suggestions and comments on marketing. Marketing directors have direct impact on market research and analysis in 31.2 per cent, and they decide on market research in 43.1 per cent of the companies.

Production units make comments on domestic market orders in 20.1 per cent, and on export orders in 23.6 per cent of the organizations.

Materials management can be found most rarely within the general directors' sphere of authority. Marketing directors have the right to decision-making in 30.9 per cent of the companies. Materials management departments have decision-making right to domestic purchasing in 27.2 per cent and to import purchasing in 21.8 per cent of the enterprises.

On *labour force and wage control,* general directors retain the right to decision-making, especially in planning labour needs and the distribution of dividends. Decisions on the rate of increasing wages belongs to economic directors in 34.5 per cent of the companies. Directors responsible for personnel matters (called "personnel and social directors") exercise mainly an advisory function. They have decision-making authority in only 12–14 per cent of the enterprises. Central labour departments decide on personnel questions in 30.9 per cent of organizations.

Financing decisions are usually made by the general directors. They decide on applying for credit in 78.1 per cent, on increasing and using development funds in 59.1 per cent, on dividing profits in 94.5 per cent of the enterprises. Technical directors dispose of technical development funds in 70.9 per cent of the companies. Economic directors exercise direct authority over financing in 29.1 per cent of the sample. The decision on dividing incentive funds within factories belongs to production units only in 7.2 per cent of the enterprises.

General directors decide on annual *production* plans in 40 per cent of the sample. (With quarterly plans, this proportion is 23.6 per cent). In the other part of the sample, technical directors have this authority. Central production departments have decision-making rights to operative programming and production preparation. Production units decide on operative production programms in only 12 per cent of the companies.

The data enumerated clearly show that strong centralization of decision-making characterises all the functions analysed and in all of the four branches of industry.

Configuration is essentially similar in the companies. It is a general tendency – and it is also related to the high degree of centralization – that the number of subordinated individuals (or units) is nearly two times higher at the highest levels (general directors and their deputies) than at the departmental level. A further indication of centralization is

that the number of people (or units) subordinated to general directors is two-four times higher than at the deputy general director level.

According to our survey, the almost single means of *coordination* – used in most of the companies – is executive *fiat.* This is characteristic of both horizontal coordination (among development, production and marketing) and the vertical one (between central bodies and production units). There is a lack of such "means of coordination as matrix-organization, project management, teams" used effectively in highly developed industrial countries. These means of coordination seem unviable in highly centralized, linear-type organizations.

(b) Organization structures show meaningful diversity from the point of view of *internal recording and the incentive system.*

Differences can be observed in the *content* of recording (economic accounting) (e.g. result- or production cost-oriented). The *economic achievements of production units are handled separately in 45.4 per cent of the companies.* There are essential differences here between branches of industry. Measurement of the achievement of production units is introduced in 59.2 per cent of the companies in the machine-building industry. In the light industry this proportion is only 18.7 per cent. The latter uses production cost-oriented recording in 50 per cent and physical indicators in 31.3 per cent of enterprises.

There are differences in the *character of the incentive* systems too. Systems based on plans, on normatives, on indexes of the previous year and combined ones also can be observed. The most generally applied system is based on plans. Its proportion is 45.4 per cent for the whole sample. Combined systems are frequently used in the chemical (58.3 per cent) and light industries (60 per cent).

Differences can also be observed in the methods *of determining the distribution of incentive funds.* Three types of solutions were distinguished:

– Direct motivation, where incentive funds are connected with certain recording indexes and are announced in advance (e.g. fulfillment of plans means a certain amount of money).

– Differentiated *a posteriori* motivation. The incentive funds are determined after accounting the profit of the company. Distribution is according to contribution (after recorded indexes).

– *A posteriori* motivation in proportion to wages. There is no differentiation according to actual contribution.

A posteriori motivation is applied by 49.1 per cent of the companies (in the engineering industry this ratio is 59.5 per cent). Direct motivation is in force in 39.2 per cent. A *posteriori* motivation in proportion to wages is used in 11 per cent of the organizations.

Our conceptual model made it possible to analyse the connection between recording and incentive systems and the organization of production – as contextual variable. This analysis has revealed that differences in recording and incentive systems *are due to variations in production organizations.* In *the case of horizontal and conglomerate production organizations* (product specialization) the object of recording (economic

accounting) is the result attained while in product organizations *specialized along technological lines* it is based on physical indexes (e.g. volume of production) and production costs.

Differentiations in recording and incentive systems have to be further analysed from the aspect of their correspondence with other structural variables. This mutual correspondence cannot be found in connection with centralization. *Strong centralization of decision-making does not allow for the proper functioning of the recording (economic accounting) and incentive system. Nor does it provide an opportunity for the management of production units to influence indexes applied in the recording (economic accounting) system. Production units are motivated toward the realization of certain performance indicators, but decisions bearing an influence on them are under the authority of central management bodies.*

Company management maintains recording and incentive systems partly due to higher level instructions and partly in consequence of control limitations deriving from complicated internal functional relations and interests.

(c) During the analysis we paid special attention to the size of the enterprises and to its influence on organization structure. In measuring size we accepted the technique employed in Hungarian statistical procedure, which is based on volume of production, value of assets and number of employees. The employee category was divided into two parts: blue and white collar workers.

Main characteristics of size are as follows:

– According to factor analysis, the value of assets is in close connection with the volume of production and only in a weak connection with the number of blue collar employees.

– Enterprises show four clusters on the basis of measurement of size (see *Table 2*).

– Variations in size – described by means of clusters – are great.

Analysis of the impact of size upon organizational structure resulted in the following findings:

– *Centralization is nearly independent of the size of the organization.* Cluster-analysis of centralization ranked 28 organizations into one cluster. These enterprises,

Table 2

Clusters of enterprises on the basis of size

Number of of cluster	Number of enterprises within cluster	Value of assets	Volume of production	Number of blue collar employees (thousands)
		(billion Forints)		
1.	6	8.9	10.7	15.5
2.	7	7.4	7.0	5.5
3.	16	6.1	3.0	6.2
4.	31	1.4	1.8	2.7

however, belong to different clusters on the basis of size: 4 enterprises to cluster 1, 2 to cluster 2, 6 to cluster 3, and 18 to cluster 4.

Two enterprises – one of which is 30-times larger than the other – belong to the same cluster of centralization. *If larger and smaller companies are both highly centralized, then size itself cannot be seen as a factor leading to centralization.*

There is no significant connection between size and coordination nor between size and time-orientation, either. Interest in production is overwhelming in the relationship among development, production and marketing, independently of the size of the organization.

Influence of dependence on centralization

Analysis of our data shows that the size of an enterprise cannot be seen as the only nor as the dominant factor of organization structure, especially not in the case of centralization.

Searching for the factor behind centralization, we have found the dominant effect of dependence. "Dependence" describes relations between an enterprise and other organizations in its environment, such as suppliers, buyers, political, social and economic regulatory organizations, and it means *dependence on resources* being at the disposal of these organizations.

Conceptualizing dependence as a contextual variable, we constructed the following explanatory scheme:

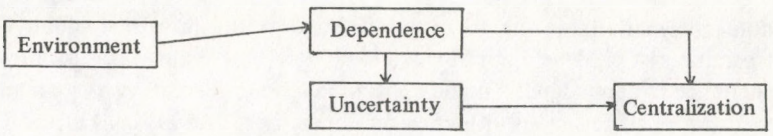

Fig. 2. Relation between dependence and centralization

Environmental influences limit, and what is more, determine the opportunities of enterprises to realize profit and accumulate development funds through the system of prices, taxes and crediting. Dependence on a central regulatory system is clearly shown by balance-sheet data in respect of performance variables. Analysis of data on economic performance, financial assistance and payments to the state budget from 1970 to 1978 has shown a strong correlation between the years 1970–1975 and 1976–1978. Data between the two major periods show weak correlation. (It should be added that in 1976 there were changes in the Hungarian economic regulatory (control) system, parallel with the beginning of a new five-year plan.) The data in question are highly sensitive to the economic regulatory (control) system and in a part of the enterprises their actual

development is independent of the organization, and hinges on changes in the economic regulatory (control) system. Cluster analysis with the variable assistance/profit has shown groups of enterprises where the main characteristics of the clusters are a large-scale increases or decreases in the variable after 1976. That is, from one year to another there have been changes is the profitability of the enterprises which cannot bet explained by changes in the real sphere.

A company may be dependent on many environmental factors and we can speak about dependence on resources within the organization too. This is the reason for the distinction between intraorganizational and interorganizational dependence (see [10]). The former means dependence within large industrial enterprises (dependence of production units on central management bodies) and the latter is concerned with the mutual dependence of organizations.

The most important variable of intraorganizational dependence is the level of the autonomy of production units. This has already been discussed in the analysis of centralization. *Our data show a low level of autonomy and a high degree of intraorganizational dependence.* Taking into account essential differences between intraorganizational and interorganizational dependence, that is, the fact that intraorganizational dependence is essentially a consequence of interorganizational dependence, *by the expression "dependence" we mean interorganizational dependence.* In Figure 2 it is also interorganizational dependence that is referred to.

Variables of interorganizational dependence analysed at this phase are as follows:

– dependence on buyers and suppliers in domestic markets,
– dependence on buyers and suppliers in international markets,
– dependence on the central excess economic regulatory (control) system.

In domestic markets – due to excess demand – the influence of buyers on the quality of products or on development is relatively low. The main factor of interorganizational dependence is dependence on the central economic regulatory system and, within this, on organizations bearing an influence on enterprises. *The most essential contextual effect is the influence of dependence on structuring organizations and within this its homogeneously centralizing effect.*

The variable "uncertainty" in *Figure 2* is interpreted as a mediator variable and describes unpredictability due to frequent changes, lack of normativity of the economic regulatory system and individual considerations. Uncertainty generally gives rise to decentralization because this makes it possible to develop a responsive type of behaviour at lower levels which recognize changes faster. However, in Hungary, this connection is reversed. *The administrative character of dependence causes a high level of centralization.* It is our supposition that only strong centralization makes it possible to see clearly the influences of the economic regulatory system on the enterprises. This also explains the relationship of inter- and intraorganizational dependence, that is, *the main reason for strong centralization within large industrial enterprises is the dependence of these companies on organizations in their envoronment and mainly on organizations of economic regulation (control).*

A general tencendy of strong centralization is clearly shown by our survey. If this is the case, then the explanatory variable must also be generally observable in Hungary, too. *Essential structural similarity of the organizations is caused by the similarity of dependence.* We regard this finding to be true, even if we also take into consideration that company management does not derive its objectives mechanistically from the environment, but selects and interprets environmental influences according to his own considerations. Similarly, decisions on forming structure are not independent of inside interest and power relations either. Management has various possibilities for choice in interpreting environment and developing organization structure.

Conclusion

(a) The organization structure of enterprises may be approached in different ways. One may discuss the question from a systems aspect, in which case stress is laid not only on the internal features of structure, but the relationship between structure and its environment is also analysed. A possible approach to the problem is that environment is seen as a given state and we deal with the so-called internal mechanism of enterprises. In discussing organizational problems and searching for their solution in Hungary, both approaches are used. With respect to our findings *we regard as the only relevant approach the one which takes into consideration the environment, too.* This is in accordance with the complexity and open character of organizations and this makes it possible to discover real connections.

(b) Dependence is the dominant contextual variable – deriving from the system of economic regulation (control) – leading to the strong centralization of large industrial enterprises. The comparison of our present survey with a former one conducted in 1969 reveals the continuous prevalence of a high level of centralization. Results of the analysis in 1969 were misinterpreted, as strong centralization within enterprises was explained to be inconsistent with the economic regulatory system. Seeking the source of the error in company managers, detailed instructions were given for decentralization and the development of recording (accounting) and incentive systems.

Companies have not accepted these "instructions" and *we see a high level of centralization to be a logical reaction which is in accordance with the characteristics of the environment.*

(c) *The weakening of the bureaucratic features* (and first of all, centralization) *of organizations cannot be expected from changes in the size of enterprises, nor from formal instructions to decentralize, but from the decreased dependence of the enterprises on central economic regulation* (control). Administrative – hierarchical type dependence should be gradually replaced by economic dependence, allowing the influences of the market and scientific-technological development to play their parts.

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ОРГАНИЗАЦИЯ КРУПНЫХ ПРОМЫШЛЕННЫХ ПРЕДПРИЯТИЙ В ВЕНГРИИ: СРАВНИТЕЛЬНЫЙ АНАЛИЗ

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В статье дается обзор анализа организации шестидесяти крупных венгерских промышленных предприятий, проделанного авторами. Теоретическим фоном анализа является подход к организации в аспекте теории контингентирования. В соответствии с этим анализ организаций был направлен на описание внутренних и внешних особенностей, стратегии, структуры, поведения членов организации и характеристик результативности организации, а также и на изучение их контактов.

Данная работа базируется, в основном, на подходе к проблеме группы Астона (Англия) и исследователей организации из Польши. После статей теоретического и методологического порядка, опубликованных авторами в венгерских журналах — в данной статье дается обзор первых результатов эмпирических исследований.

В статье рассматриваются проблемы, стоящие в центре внимания развития организации в Венгрии в настоящее время. К их числу относится влияние величины предприятий на функционирование организации и возможность развития внутреннего механизма предприятий. Анализ доказывает, что величина не является единственным и не самым важным фактором, влияющим на организационную структуру. Наиболее важным фактором, влияющим на структуру, оказалась зависимость предприятий от системы управления экономикой. В деятельности организаций коренных сдвигов можно ожидать только в том случае, если изменится наиболее важный фактор воздействия на структуру — зависимое положение предприятий.

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FROM VERSAILLES TO HELSINKI: STRUCTURAL CHANGE IN THE ECONOMIES OF EASTERN EUROPE*

The paper introduces some of the issues treated in a collective *Economic History of Eastern Europe 1919–75*, the first volume of which is shortly to appear (and of which the author of the paper is the General Editor). It begins by contrasting in a series of macroeconomic statistics the agrarian and rural dominance in the 1920s with the urbanized industrialized system of the 1970s and then examines the characteristics of the period as a whole. The depth of the depression of the 1930s and devastation of the Second World War are considered in relation to the shift that took place in its trade orientation from the West towards the East after that War.

The article also condisers the comparison of the pre- and post-war systems in the light of valuation problems arising from a market to a planned economy.

I offer a contribution that contains the present, but within the perspective of the recent past. That I can attempt to sketch a composite picture of the evolution of Eastern Europe's economic structure and hope to say something new is wholly due to an immense collaborative effort of East-West academic relations to write the Economic History of Eastern Europe from 1919 to 1975.

The characteristics of the period

The *History* encompasses the period between the Treaty of Versailles in 1919 and the Final Act of the Helsinki Conference in 1975: each ratified Eastern Europe's frontiers as they were redrawn at the end of a World War. Before the First War, most of Eastern Europe was divided between great empires – Russian, German, Austrian or Turkish; the minor agrarian nations of the Balkans – Bulgaria, Montenegro, Romania and Serbia – made up the rest. After that War, all but one (the German Democratic Republic) of the eight countries of present-day Eastern Europe were established in something like their present geographical area and accorded the opportunity for autonomous economic development. Their dependence then on the major capitalist Powers and their isolation from the neighbouring Soviet Union were violently reversed at the end of the Second War to dependence on the Soviet Union and an isolation from the West so strictly enforced that the border was termed the 'Iron Curtain'. A process of détente soon began, and culminated in the Helsinki Conference on Security and Cooperation in Europe. Whereas, furthermore, the uniform acceptance of the Soviet

*On the basis ot the author's lecture at the Hungarian Academy of Sciences, September 1981.

model of central planning was true enough of 1949, the ensuing quarter-century saw a diversification of mechanisms which is part of the task of the *History* to document.

Its function also is to chart the transformation of the region into industrialized and predominantly urban states. In 1920 65 per cent of the region's population of active age were occupied in agriculture,[1] many under conditions that could justifiably be categorized as feudal. The share of the total population of 81 millions whose income was derived from wages (other than as farm labourers) -- a group that in Marxian terms would be the 'industrial proletariat' – was of the order of 14 per cent.[2] In 1980, a population of 118 million was almost 60 per cent dependent on wage earning and a further 24 per cent were remunerated as members of cooperatives.[3] If the GDR is included for 1980, an aggregate population of nearly 135 millions was 61 per cent dependent on wages and salaries but 22 per cent from cooperatives.

The *History* is an account of the six decades within which a quarter of the Continent brought itself into the industrial life-style that had much longer characterized Western Europe. But the economic principles which governed the development in the East were twice abruptly changed. In the 1920s the doctrines which had prevailed before 1914 continued to be implemented, with pressure to conform not only by the capitalist market of the West but institutionally through the League of Nations. The world depression aggravated the nationalism of List into ever-sharper protection during the 1930s, but it was the overwhelming influence of Nazi Germany, culminating in military occupation, which brought a siege economy. Autarky also became an aim when the precepts of Marx, Lenin and Stalin were being enacted by communist parties set in power by a Soviet victory coextensive with the region, but East-West trade was again flourishing by the 1960s, and for a time grew considerably faster than trade among developed capitalist countries. That boom ended with the oil crisis of 1973–74, paradoxically on the very eve of the Final Act of Helsinki, Basket Two of which anticipated in proportionate terms a return of East-West European exchanges on a scale of the 1920s.

The factors which induced each discontinuity were not of Eastern Europe's making: the depressions of 1930–34 and that from which we are at present suffering must be laid at the door of capitalist speculation. The Wall Street boom and crash and the collapse of the Credit-Anstalt are of a kind with OPEC's quintupling of the price of oil. Let me press the parallel further and suggest that the 1920s are also of a piece with the two

[1] Data for 1920 in [1]. Albania added from [2], 1923 population extrapolated to 1920 and wage earners estimated from urban population.

[2] Very approximate estimates based on [3].

[3] A population of 91.5 million, and its breakdown by dependence on wage-earning and on cooperatives for latest available years, is shown for five members of the Council for Mutual Economic Assistance (CMEA) in the region in the CMEA Secretariat's publication [4]. Comparable breakdowns for Albania and Yugoslavia are in [5, 6]. The population of the two latter was from [7]. 'Cooperatives' include cooperative farms, industrial cooperatives and all non-private occupations in Yugoslavia, because every enterprise and office operated under the 1974 Constitution as an 'organization of associated labour'.

decades to 1973. They were both post-war booms but – longer in the second case because of government policies – Keynesian demand management in the West and Stalin's supply management in the East. In each case trade flows were expanding on an ever increasing basis of debt: the debt service ratio of some East European countries in 1930 were repeated in 1980 and at both dates at least one Eastern partner had to seek a moratorium with its creditors.

The warrant to compile a comparative economic history such as this demands unity and novelty. The first two decades are bounded by the World Wars; the third decade is marked by hostilities, the effort of reconstruction and a socio-economic transformation generated by fundamental changes in political structure and external orientation; the remainder of the period chosen is long enough to offer a reasonable perspective to assess East European forms of socialist planning.

The cataclysms of each world war pressed on all countries of the region a similarity they did not have under more normal conditions. By 1919 every state had either had its frontiers redrawn – Bulgaria, Hungary and Romania – or had been newly created – Albania, Czechoslovakia, Poland and Yugoslavia. All fostered political and economic relations with the victorious Western Powers, chiefly with France (the government of which actively promoted replacement of German commerce and equity by those of its own nationals) but also strongly with the United Kingdom and the United States. The Successor States desired, or were compelled, to diminish reliance on the Imperial capitals of Berlin, St. Petersburg, Vienna and even, in slighter degree, Constantinople. But among themselves after the dissolution of the old Empires they found more occasions to boycott, than to collaborate with, each other. Then war preparations and hostilities came again and the Nazi 'New Order' and the exigencies of war mobilization established, however briefly and wastefully, a certain regional coordination. But the objective was exploitation in favour of Germany and only Albania gained in economic assets from alien occupation; the balance of the war-time period was a net tribute in Germany's favour. The physical destruction of liberation cost the region dearly and after it, as after the First War, the focus of the region again shifted – this time to Moscow. The Cold War shrank East-West trade almost to insignificance but just as the 1920s, so in the late 1940s, and early 1950s economic relations within Eastern Europe itself were severely constrained.

Frontiers within the region were open only for goods traffic and official travel and for defence and police matters; there was scarcely any passage of civilians or transactions in other services. Their currencies became rigidly inconvertible, even to the prohibition (until 1958) of the carriage of trivial pocket-money across another east European border. Stalin's government preferred to exercise separate control over each East European state and to discourage, though not to exclude, interaction between them. When death took the reins from Stalin, both East-West and intra-CMEA trade developed, but the degree of self-sufficiency was slow in falling.

There was thus a sharp directional shift in the trade of East Europe in the decade after each World War. The renascent states of the Versailles settlement of 1919 deepened their economic flows from and to the West, and benefited from a respectable, though

inadequate, stream of capital and technology until forced by debt and recession to cry halt in the early 'thirties. The East European signatories of the Paris treaties of 1947 canalised much of their commerce and, for the vanquished, their reparations towards the USSR, but had to repair and develop their economies by themselves. The normal conditions for trade and the transfer of technology could scarcely be considered as reinstated before the 'sixties; the impediments of the 'fifties included the prohibition of many types of advanced Western equipment under the NATO strategic embargo, the high degree of quantitative restriction on East European counter-deliveries, and the virtual absence of commercial credit under government guarantee while compensation for the postwar nationalization remained unresolved. International failures played their part in deepening the divergence between the Europes of the two sets of Peace Treaties. The 'tariff truces' of Portorosa, 1921, Genoa, 1922, and Geneva, 1927, were abortive and the United Nations was baulked of responsibility: the three ex-enemy states of the region were not allowed into membership until 1955 (the two Germanies not until 1973) and the USSR cited the Anglo–American voting majority at the General Assembly as confirmation of the Organization's partiality. In the 'twenties, the League of Nations promoted economic stability in the region at the expense of growth, for Eastern Europe was the 'development problem' of a world where Africa and Asia were colonial appendages. In the late 'forties, after heroic efforts by UNRRA and the Emergency Economic Commission for Europe, the potential of the United Nations ECE was eroded by the confrontation of the Great Powers. The establishment of the Organization for European Economic Cooperation in Paris in April 1948 and of the Council for Mutual Economic Assistance (CMEA) in Moscow nine months later set the seal on the economic division of the continent.

The paradigm of the Soviet economy was as little regarded in Eastern Europe between the Wars as it was uncritically lauded in the late 'forties and early 'fifties. Both attitudes can readly be seen in retrospect as unreasonable, but in postwar reconstruction the state would in any circumstances have played a larger role after 1945. The breadth and depth of resource mobilization were much greater and a retrospective confirms the contemporary assessment that "the rate of industrial recovery was definitely higher after the Second World War than it was after the first" [8]. The lessons of the past had at least in part been learnt in the Eastern Europe of 1945–48. The organization of a mixed economy saw the restoration of peace-time production and the readiness to enlarge the public sector of production was an inheritance of the 'thirties and not solely the reflection of Soviet-type planning.

Macroeconomic measurements

Time will not allow me to delay more on institutions, for I should devote some moments to quantitative change. Two years after the end of hostilities in 1918 the national product of the region probably stood well below the prewar level. The most

industrialized state, Czechoslovakia, showed a GDP only 90 per cent of prewar in 1920; Yugoslavia was better at 94 but Hungary was worse placed at 85. After account of population movements, the spread was wider – 92 per cent on a per capita basis for Czechoslovakia, but 98 per cent for Yugoslavia and 82 per cent for Hungary. The experience of Western Europe was broadly similar: United Kingdom national product in 1920 was 90 per cent of 1913 but France was worse placed at 82 per cent while Italy was 9 per cent above its 1913 level. Germany of course was hard hit and, with no data available for 1920, was still at 90 per cent of the prewar in 1925.

After recovery from the postwar recession, the three countries just cited recorded rapid rates of overall growth. Between 1924 and 1929 the average annual increment of national product was 6 per cent in Czechoslovakia and Hungary and 4.5 per cent in Yugoslavia; Bulgaria and Romania managed only 2 per cent.[4] If the two latter are set aside as still backward agrarian economies relying on primary products for exports, these were respectable achievements in comparison with the major West European economies. Italy and France over the five years exhibited 3.5 per cent annual growth and Germany, from 1925 (since the inflationary chaos of 1924 should be out of account), showed 2.5 per cent. The UK did not quite reach one per cent.

Romania compensated for its slow growth by continuing slowly to expand production even during the world depression, but elsewhere the impact was severe. Except in Czechoslovakia, where the effects persisted until 1935, the trough was reached in 1932 or 1933. The range within which national products declined was remarkably similar in Eastern and Western Europe: the ratios of one part of the continent can be paralleled in the other. Czechoslovakia, which continued its downward path beyond 1933, was in that year at 86 per cent of 1929; the UK and France were at 88 per cent. Yugoslavia was just under 90 per cent; Germany was just over 90 per cent. Hungary was 94 per cent; Italy was 95 per cent.

After the Second World War, if no allowance is made for population change, Western Europe regained its prewar national product more rapidly than did the East, although – because Eastern Europe as a region lost population whereas Western Europe gained – per capita figures show divergence in the opposite direction, with the East higher than the West against their respective 1938 levels by 1948. More importantly for Eastern Europe itself was that its output two years after the end of hostilities was much further below the prewar level than it had been in 1920. On the other hand the average rate of growth achieved in the region during the first two decades of central planning (1950–70) was better than the peak rates shown in the five best interwar years (1924–29). To cite more than the 1950s and 1960s would introduce the same exogeneities as to add the 1930s to the 1920s, for the aftermath of the oil price explosion of 1973 was recession in the West (with loss of trade opportunities and consequential East European indebtedness) and a deceleration in the East. In terms of annual rates over twenty years, the two least developed economies, Bulgaria and Romania, at respectively 7 and 6 per cent, did as well

[4] The source for these and other West European national products cited in this section is [9].

is the two fastest-growing countries in the best interwar quinquennium, Czechoslovakia and Hungary (6 per cent). In 1950–70 the other centrally-planned economies clustered around a 4.5 per cent growth rate [10] while Yugoslavia, operating a more decentralized form of economic management, probably averaged a little above six per cent, and about 6.5 per cent if the decline in product during 1950–52 is omitted by starting the series from 1953, the end of the transition to 'social' rather than 'central' planning [11].

The spread of rates was somewhat wider among the major West European powers. At one extreme the Federal Republic of Germany during twenty years from an under-capacity start ran at some 7.5 per cent per annum; at the other, the UK showed a 3 per cent growth. Italy (on a 15-year series from 1954) experienced 6.5 per cent, but France 5 per cent.

One further comparison may usefully be made – of East and West Germany. The GDR enters our *History* at its creation in 1949 but a key event in its economic development, however, it may be regarded in other terms, was the closure of the frontier with West Berlin in 1961. Between 1960 and 1976 a recalculated GDR output series on West-German prices and gross domestic product increased by 4.5 per cent per annum, against 3.8 per cent in the Federal Republic over the same period [12].

The pattern of growth since the Second World War has been considerably steadier in all the centrally-planned economies of Eastern Europe than in the West, but exceptions were already emerging in the early 1960s and there may even be to a sort of stagflation threatening the 1980s. The causes lie in the cyclical underutilization of productive factors under capitalism and their overfull employment under socialism. In Budapest I have no need to examine the characteristics that János Kornai has analysed in a "shortage economy" [13].

Growth and distribution

The study of development in market economies has indicated an inverse relationship between rates of growth and the degree of proximity to an egalitarian distribution of income. Some evidence from Eastern Europe can be found from its interwar period under a market mechanism, for Bulgaria, with the slowest rate of growth, had the most equal distribution of income. But it is only for the period after 1950 that a certain amount of documentation becomes available.

Launching their plans for development through industrialization in 1949–51 the East European governments determinedly associated growth with income-differentiating incentives – between peasants and the non-farm population and among the latter. But the wage revisions of the mid-fifties modified differentiation to a point which led to an inadequacy of incentives for managerial and technical personnel. Some of the worker resistance to general economic reform a decade later was engendered by concern lest such staff should be overpaid. After the reforms, however deeply or little they were implemented, differentials per wage earner seem to have widened, but those per household member have been reduced. The dispersion of income became narrowest in Albania, after

the proclamation of 'workers' control' in 1966 and widest under Yugoslav 'workers' self-management', especially after the liberalization of 1965. Money remuneration, however, nowhere necessarily reflected disparities in actual levels of living because access to buying many goods and services was selective by rank or employment throughout the period (though least in Yugoslavia). Furthermore, the growth of a 'second economy' – the private provision of services and sales of goods outside state and cooperative channels – increasingly redistributed incomes. The phenomenon enlarged as money wages rose faster than officially-supplied goods and services at prices held down from market-clearing levels for fear of the repercussions of overt inflation.

Even if differentiation could be measured under such conditions comparison between income distribution in the capitalist and socialist periods should properly take account of the degree to which personal preferences for working and not working were satisfied. Involuntary urban unemployment and rural underemployment before the War were replaced by job security and comprehensive social insurance after it. But today job security even in the planned economies is under threat and if there is a keynote on which I ought to end it is on the pan-European urgency of reflation. As one of those 364 dissident British economists [14], I want it first in my own country.

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ОТ ВЕРСАЛЯ ДО ХЕЛЬСИНКИ — СТРУКТУРНЫЕ ИЗМЕНЕНИЯ В ЭКОНОМИКЕ ВОСТОЧНОЙ ЕВРОПЫ

М. КЕЗЕР

В статье представлен ряд выводов, содержащихся в коллективном издании «История экономики Восточной Европы. 1919—1975», первый том которого в скором времени увидит свет. Автор статьи является ответственным редактором этого издания. В начале статьи сопоставляются некоторые макроэкономические статистические данные периода 1920-х годов, для которого в основном было характерно аграрное развитие, и 1970-х, когда развитие шло по линии урбанизации и индустриализации, а затем анализируются особенности периода в целом. Кризис 1930-х годов, а также причиненный второй мировой войной ущерб повлияли на изменение послевоенной внешнеторговой ориентации в направлении с Запада на Восток. В статье также дается сравнение до- и послевоенной систем в свете проблем цен, определяемых переходом от рыночной к плановой экономике.

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L. CSABA

PLANNING AND FINANCES IN THE DECADE AFTER THE ADOPTION OF THE COMPREHENSIVE PROGRAMME IN THE CMEA

Analyzing the causes for the lack of success in the attainment of the real transferability of the common currency of the CMEA in the 1970's the author reviews three sets of causes. He explains that along with real economic, institutional factors also played a role in the increase in the share of extra-regional cooperation of the turnover of individual member-states. Analyzing new developments in cooperation in planning he examines the linkage of long-term special purpose programmes with national planning systems. Analyzing the financial sphere he explains why the different partial financial improvements, envisaged by the Comprehensive Programme have not come into being. Finally he looks into the possibilities of creating a convertible national currency of a single (individual) CMEA-member-state.

The cooperation mechanism of the CMEA had been established in the late 1940s and early 1950s with the purpose of implementing the economic strategy of forced seclusion from the world economy and as an international extension of centralized systems of economic control and management, based on the breaking down of plans, already established by that time in all East European countries. It may be stated without exaggeration that it has preserved its substantial features quite up to now. The volume and structure of mutual deliveries are worked out basically in an import-oriented way as a completion of the system of national economic balances drawn up in physical terms and of the material–technical supply. The planning of imports precedes that of the amount and structure of exports required for the compensation of these imports both logically and in time. These demand and supply lists drawn up in physical terms are collated in the framework of plan coordination and later on in that of the coordination of the medium-term national economic plans. Resulting from the nature of the matter this is done basically bilaterally and this bilateral mutual coordination determines decisively the dynamics and structure of mutual turnover for five years ahead. Since the preliminary distribution of available products through national economic plans precedes money movements, these latter are not given even a relative independence [1]. What is more, in consequence of the rigid separation of the commodity and money aspects – and because of the above physical determination – there are no anonymous goods, either, nor can any metamorphosis of commodities be spoken about in the sense of Marxian political economy [2].

As a matter of fact, it necessarily results from the bilateralism equally observable practically in the fields of planning, trade and accounting as well, that the "purchasing power" of unit of account differs by bilateral relations despite the identical nominal gold content. Moreover, since, resulting from the nature of

the aforementioned economic mechanism, contractual prices do not express demand and supply and scarcity relations (this is a contradiction immanently following from the application of the world market price principle), the relative scarcity or abundance of products is not reflected in low or high prices, but – similarly to the case in domestic markets with fixed prices – in the development of the spheres of so-called 'hard' and 'soft' goods. By hard goods usually goods greatly demanded for within the CMEA community are meant. These are not necessarily goods with favourable sales possibilities also on the world market – e.g. beef is in excess supply on the world market, yet it is of the same hardness as oil in the trade of member countries in consequence of shortages in the CMEA countries. Similarly, in certain relations spare parts of outdated machines still in use in the given country are qualified as hard since they cannot be purchased from anywhere else.* Therefore, in this specific medium it is the notion of hardness that reflects commercial and demand-supply relations – through multiple subjective transmissions – and is in this mechanism an even more important factor of commercial advantages than prices are. Namely, surplus revenues received for soft articles cannot be spent on the purchase of hard goods with some discount: for this only the same kind of articles, expensive as compared to the value judgement of the world market, may be obtained. It is clear that this extraordinarily rigid bilateral balancing limits the growth of mutual turnover to a level determined by the capacity of the party capable of only smaller deliveries. Therefore, the application of multilateral settlements, and even more the use of convertible currency, would largely increase interestedness in mutual turnover. It was with this purpose that the agreement on multilateral settlements was concluded in 1963, and then the International Bank for Economic Cooperation having the role of a multilateral clearing centre was established in 1964.

However, the practice of more than one and a half decades passed has shown that the intention formulated in the above agreement and institution has not come true. In their analyses several Czechoslovak, Bulgarian, Polish, Soviet and Hungarian economists demonstrated many-sidedly that endeavours for bilateral equilibrium and other features of CMEA-mechanism summarized in the foregoing persisted practically unchanged both in planning and trade, consequently also in settlements. As a consequence, in vain has the unit of settlement been called *transferable* rouble ever since 1964, it has not really become transferable under the conditions of structural bilateralism. This follows from the fact that there is no reliable tool or method by means of which a calim acquired for the delivery of a certain article to a given country might become anonymous and could be used, in a mutually acceptable way and measure, for payment of liabilities arisen in consequence of the purchase of another commodity group in another country. As a consequence, in the trade regulated by CMEA agreements and settled in transferable rouble, transactions do not end with the financial operation, but only with the delivery of goods stipulated as counter-value [4]. Therefore, in the ample and polemic literature on the money functions and overall functioning of the transferable rouble Imre Vincze's

*This has been analyzed and systematized in detail in a recent study by Jenő *Bársony* [3].

following conclusion seems to be hardly disputable: "In my opinion it is wrong and superfluous to try to make believe as if the collective currency would be money within the CMEA-community in the same sense as convertible currencies are in the capitalist world", just as the chain of thoughts expounded over the entire chapter according to which the transferable rouble fulfils money functions only to a very limited extent or not at all [5].

It seems, therefore, that the limited character of market categories and laws co-eval with the existence of sovereign states [6] has still remained the basic contradiction of CMEA-cooperation ever since the mid-1960s and new developments have appeared – at least in the field of finances – mainly outside the sphere of formal harmonization of interests. Thus in 1975 the practice of price formation was changed prior to the end of the plan-period, investment contributions became a general practice of cooperation from previously only isolated examples and trade settled in convertible currencies began to develop also with *ad hoc* character – mainly in order to eliminate intermediary trade. The latter has, by the way, not gained approval in economic thinking even up to now.

Regional integration and global division of labour

Nowadays, the cooperation of East European socialist countries is realized in the framework of the CMEA under basically changed economic policy priorities and radically altered world economic conditions as compared to the period thirty years earlier. The establishment of – often even too – complex industrial structures and the pushing into the background of cold-war embargo policy, and that peaceful coexistence became a main trend of international development allowed the socialist countries mentioned to shape the efficiency of their economic growth in consideration of the advantages of a worldwide division of labour. The evolving scientific-technical revolution, scientific and technological progress require such a concentration of assets that "practically excludes the possibility of complete technological self-sufficiency even in the most advanced and biggest countries" [7].

Therefore, in the 1970s a certain pushing into the background of regionalism could be observed in the CMEA, a process analogous with world economic processes [8, 9, 10] especially depending on the efficient adjustment to the changing system of exogeneous conditions. This real economic development was to some extent opposite to expectations of the professional public opinion, based on the economic literature of the 1950s and 1960s, according to which the mutual turnover of countries participating in regional integration would increase at the expense of extraregional trade as a manifestation of the trade-diverting and trade-creating effects of integration. "The theorem of Western economic literature according to which the direction of trade is shifted 'inward' in integrated communities can not be applied to the socialist economic integration, since it is not characterized by collective protectionism", J. S. *Shiryayev* points out correctly. "*Namely, relations among member countries are not motivated by an artificial separation from the*

world market, but by quite different, deeply rooted economic and social factors." [11] (My italics – L. Cs.)

Therefore, the success of integration may not be judged by the share of internal trade either on the basis of theoretical or of practical developments. It has not been formulated as a goal to be attained in any competent, top level joint document of the CMEA that this cooperation mechanism would be really successful if it stimulated for the maximization of trade among member countries, thus it cannot be accepted as a criterion of judging cooperation mechanism, either. At the same time, this requirement is raised from time to time in important publications and documents of certain CMEA agencies. Namely, the process of world economic integration evolving in the 1970s is not opposed to cooperation within the CMEA, what is more, it may even become a basis for the latter, since the enlargement of turnover among each other has recently been impeded precisely by the lack of commodity funds competitive also on the world market. By the way, in case of a grouping of medium-developed countries it would be difficult to accept even as a theoretical possibility that they could ensure the capital, the most advanced technology, management and market organization methods as well as raw materials required for the modernization of the economy and structural adjustment to changing world economic conditions for each other *then* and *with the terms needed* in order to be able to achieve some success in the sharp adjustment competition going on in the world market. Even in the case of agriculture that may be qualified as mostly "regionalizable", the conditions of regional self-sufficiency could not be created, what is more, in case of East European countries they ceased, since for intensive agricultural development fodder and chemical fertilizers have to be imported generally and continuously from the West, in years with poor yield even imports of cereals are required, and that, in the biggest member-countries. What is more, however surprising it is, even a regional independence of raw material supply cannot be spoken of in the CMEA community at present, since while mutual deliveries of member countries covered 93 and 94 per cent of total coal and coke demands, in 1979, this figure amounted only to 70 and 68 per cent in the case of iron ore and oil [12]. Since Soviet deliveries will not increase or will even decrease in the above products from 1981 on, the degree of self-sufficiency will unavoidably diminish and this alone will work towards the increase of extra-regional exports.

Since it is a general feature of the development of the international division of labour in the manufacturing industry that in exports the share of machines, while in imports that of spare parts show an increasing trend, J. F. *Kormnov*'s statement may be fully agreed with, according to which precisely a cooperation in spare parts and partial units developing at all-European level could largely contribute to the intensification of cooperation within the CMEA [13].

Besides, if we take also the large Western import content of exports to the rouble area into consideration (exceeding 50 per cent in joint investment projects), then one should ponder that until now the rouble conversion of imports from the dollar area took place as a natural process, while the opposite process did not, despite the fact that it had been formulated as a requirement by the economic policy in several countries. What is

more, there has already developed a situation by now that also for the increase of imports from CMEA relations the export capacity to Western countries has to be improved: the CMEA export volume increasing because of growing CMEA imports and the deterioration in the terms of trade contains to a growing extent materials and spare parts purchased against convertible currencies and this is again possible only if exports to the West are increased [14].

It follows from this and from the fact that the balance of Western payments has become a primary concern of economic policy in the European CMEA countries that the CMEA may best contribute to the development of member countries if it becomes a tool of world economic integration and if cooperation on third markets will have a central part in its activity. For this idea formulated already in several member countries to become a practice, adequate mechanism conditions are obviously required; namely, unsolved internal problems of cooperation impede also the joint solution of external problems. Mostly known problems in this field are the clumsiness of settlements and reluctance to compromises as well as the insufficient independence of participating enterprises. Clumsiness and lack of elasticity resulting from the preponderance of administrative forms of foreign trade that may become more and more a burden under contemporary world economic conditions should not be forgotten, either. Attention is drawn to the role of institutional factors by József *Misala* according to whom the bureaucratism of foreign trade system and the continuation of import substituting economic strategy are also reasons for "structural anomalies" of East-West trade. Apart from the slow process of decisionmaking, and the lack of an organic relationship between production and foreign trade, too little attention is paid to the proper development of forms, trends and character of cooperation [15].

It seems that in the 1980s there will be better possibilities for a true reform of the mechanism of CMEA cooperation as required by several more factors than in the previous decade. This results mainly from the fact – correctly pointed out by an analysis published in the central paper of the Central Committee of the CPSU – that in the 1980s, because of the scarcity of real economic production factors, the exhaustion of reserves of extensive growth and the slow dynamics of international trade measured in real terms it is not the "real economic", but the institutional, organizational factors that will have primary importance in the development of European CMEA countries. This is true so much the more, since in the last decade the poor control of investment plans, technological development, imports and of the development of personal incomes all had a part in the inadequate development of efficiency [16]. The *further development* of processes of change already begun in internal economic mechanisms may be a basis for an eventual reform of the mechanism of CMEA cooperation.

The mechanism of CMEA cooperation may also be regarded as the totality of planning, market and organizational-institutional factors. At the same time it *is a significant feature distinguishing it from internal control systems that it is not the institutional element that has a determinant part here.* Namely, experiences obtained in the course of the improvement and reform of economic control and management during

two and a half decades indicate that within the individual countries – as against expectations and concepts of the 1960s – it is not the existence or elimination of plan directives, the compulsory or indicative character of certain indicators that determine the character of the entirety of the economic mechanism, but the relationship of economic subjects to the hierarchy of state administration. In case the direct subordination to the central hierarchy (state apparatus) continues to exist, this will determine the behaviour of economic units even after elimination of sectoral control and the compulsory breaking down of plans, respectively, while elimination of this direct relationship makes the realization of arbitrary decisions either by direct (administrative) or by economic tools practically impossible. As against this, the joint institutional system of the CMEA, consisting of bodies working on the basis of the principle of sovereignty and interestedness as well as with participative and indicative character (only bilateral – exceptionally multilateral – agreements having a binding force), is not of a determinant, but of a complementary character as compared to classical fields of planning, commodity-money (market) relations and of economic analysis. Therefore, it will be sufficient to review developments of planning cooperation and monetary-financial cooperation in the following.

New developments in planning cooperation

The coordination of medium-term national economic plans – as it could be seen in the foregoing – is of primary importance for the entire cooperation, what is more, even for the economic growth of individual member countries. It is very important from the viewpoint of cooperation because the amount, structure and dynamics of mutual deliveries are determined mainly here and the yearly minutes of deliveries only mean mostly corrections of plan over-fulfilment character. Furthermore, each new form of planning cooperation is adjusted to the framework established by plan coordination and not the plan coordination adjusts to new forms of planning cooperation. And, for the growth of individual national economies the coordination of medium-term plans is of decisive importance, because the first step of planning based on material balances (applied in the individual economies) is determination of the raw material, fuel and import needs of the economy. Being strongly foreign-trade-sensitive countries which are in many cases short of raw materials, whose manufacturing industries developed mostly according to each other's – mainly of the USSR's – market demands, the results of plan coordination with CMEA countries and first of all with the USSR are of decisive importance for them, concerning both raw material purchases (input) and sales (output). It is well-known that a basic precondition of the period of impressive macro-economic dynamics of the 1950s and 1960s was the stable and practically unlimited possibility of raw material purchases from the USSR, while among the direct reasons of the contemporary slowdown of economic growth exhaustion of this factor plays a not negligible part. This is true even if in Hungary it could be observed already since 1953 that such purchases have not always been possible as and when they would have been required.

Plan coordination as a top level and conscious process is somewhat fetishized by a part of economic literature and practically identified with social consciousness, and that may seem a little hasty. "We have often emphasized", declared David *Davidov,* Deputy Chairman of the Bulgarian Committee for Scientific and Technical Development, "that planning is a subjective activity, consequently it is not free from certain manifestations of subjectivism and arbitrariness" [17]. In the contemporary practice of plan coordination reconciliation of the operation of deviating economic mechanisms as well as full consideration of particularities resulting from different "plannability" of individual fields and activities cannot be regarded as satisfactorily solved. The present practice of collation covering uniformly five years sets down obligations defined in physical terms for too long periods for the individual national economies in certain fields – e.g. articles of fashion, computer industry –, while the same five years are too short a period from the viewpoint of basic infrastructural and extractive industry development projects. The latter are no longer decided upon in the framework of five-year plans even at present, though they constitute two outstanding fields of cooperation [18]. Thus, Professor Shiryayev's evaluation may be accepted according to which "Plan coordination and its basic factor, the specialization of production expressed in that of deliveries may not be a form and method of joint economic activity suitable for the solution of all kinds of production and scientific-technical tasks." [19] That is why new forms of planning cooperation, joint planning, multilaterally coordinated integration plans and long-term target-oriented cooperation programmes have been developed.

As a matter of fact, even the notion of joint planning is disputed, in the sense that, with a supra-national planning bureau missing, whether it would not be more correct to call the processes starting from national plans and realized through corresponding chapters of national medium-term plans with the traditional terminology: the cooperation in planning of CMEA member countries. The situation is, however, different concerning such documents as the multilaterally coordinated plan of integration measures. Namely, the objective of investment, its technical and economic parameters as well as major features of the participation of individual countries, ways of repayment, the ownership and ways of running of the projects are *ex ante* determined here. As regards realization these are such projects, coordinated by a joint government commission, where the capital and labour resources of the member countries as well as sources of convertible currency mobilized by member countries are amalgamated with a common goal and in the interest of needs to be satisfied jointly. It seems that in this case one could speak about joint or common planning with good reason.

Using the above term in a broader sense is, however, not justified in my opinion, since the process of socialization of labour "has *not* yet led in CMEA countries to an overall cooperation of member countries evenly covering their *entire* national economies and all fields of economic activity. Member countries participate in cooperation on the basis of their owner's, i.e. interestedness position in cases if this brings *additional returns* for them" [20].

That investment contributions became *a general practice* was really a novelty in the action plan of multilateral integration. Investment credits had already been granted also in the 1960s – mainly on bilateral and occasional basis – and in economic literature arguments and counter-arguments were advanced concerning the considerable expansion of investment contributions. This claim was first raised by Soviet economists in the mid-sixties objecting to the low price level of the raw material producing sector and to the high one in the manufacturing of finished products (as compared to world market levels), furthermore arguing with the longer than average rate of return on investments of the extractive industry. In 1975, following the explosion of oil prices, two considerations concurred. On the one hand, the gap between the nominal price levels of Soviet oil exports to CMEA countries reflecting the world market valuation of 1966–1970 and of those to Western countries following the OPEC price level increased already to fivefold had widened by that time, from which some economists – in my opinion hastily* – concluded to considerable comparative price losses and sacrified profits, respectively. But, on the other hand, the demand for a strategic and security treatment of fuel imports and preference for covering these needs through long-term agreements increased on the part of small CMEA-countries upon the effect of the oil shock. Thus at the Budapest Session of the CMEA in 1975 an agreement was reached that joint efforts would be made on *multilateral basis* to establish extractive capacities first of all in the territory of the USSR for meeting their needs in the long run, in a form fixed in agreements involving *inter-state obligations* and serious investment burdens (though not determinant ones) for each national economy except for the Soviet one.

The novelty of the coordinated plan of multilateral integration measures is indicated from the aspect of planning techniques also by the fact that – except for Hungary – *a direct relationship has been established between the joint integration plan and the national plans* in the form of plan chapters on integration included in the national economic plans of the individual countries. (In Hungary there is no such plan chapter, but the fulfilment of inter-state obligations has been ensured by the combination of directive and indirect methods having become general for CMEA relations in the practice of Hungarian economic control and management. Though this plan chapter may seem in a certain sense a duplication of other plan chapters – e.g. on investment, manpower, material supply, foreign trade – of the national economy, yet it should not be considered merely as a formal act. Namely, it is known from the history and practice of planned economy that among various plan estimates, what is more, even within the plan of foreign trade significant inconsistencies may arise, moreover, a deviation from long-term estimates may occur also with the most important, – so–called trade policy items – and not only in the case of flood, earthquake or other *vis maior.* By attributing such great political importance to the integration plan it could be ensured that the chapters mentioned be really consistent in connection with these projects and occasional incon-

*I tried to expound this conviction in the studies [21] and [22].

sistencies should not be solved in a frequently occurring way, namely, by giving priority to domestic tasks at the expense of international obligations.

At the same time, essentially simultaneously with the elaboration of the plan of multilateral integration measures, international literature already called attention to the danger that investment credit granting could continue only as long as it was in harmony with the capacity of the individual member countries; in an opposite case, it could namely lead to domestic tensions [23]. It also turned out that the elaborateness of the value side of these joint investment projects lagged far behind that of the physical side [24]. As a matter of fact, it should be clear that the individual countries concerned are interested first of all *not* in the *total* of results deriving from international cooperation, but *only in the part* that would directly increase the efficiency of their *own* economic activity [25]. Therefore, the extent to which the individual participants are interested depends decisively on the financial terms of the transaction. But, according to experiences this requirement has never been fully realized ever since then. In the literature of several countries attention is drawn to possible consequences. Thus, Hungarian authors raise first of all the unsolved problems of the valorization of credits granted on a sliding price basis, of the economically justified rate of interest, of the redistribution function of the rate of interest, of the techniques applied in the financial settlement of projects and of the price reduction usually concomitant with the right of pre-emption [26, 27, 28, 29]. Bulgarian authors draw attention to the following: (a) the form of international credit has been pushed into background by deliveries above the plan, (b) the uniform treatment of all joint investment projects was unjustified (12 years' period of return, 2 per cent rate of interest), especially in the extractive industry where the term of repayment lags 1.5–2.5-fold behind the rate of return in the extractive industry of member countries, (c) it caused problems that articles in short supply also in domestic economies had to be delivered and structurally advanced products and intellectual work only had a little share in contributions, (d) problems connected with the price of products delivered after putting into operation, the accounting of the convertible currency content of constructions and the adjustment of rates of interest to international practice are as yet unsolved [30].

The method of long-term target-oriented cooperation programmes (also called special-purpose programmes) adopted at the 1976 Session of the CMEA as a tool of joint and strategic reaction to world economic changes has been developed as a practical way for solving a problem of plan coordination, of harmonization for a period not long enough. The coordinated plan of multilateral integration measures was an integral part of the target-oriented programme both between 1976 and 1980 and will be so also between 1981 and 1985, but it is not identical with it. Two well separable periods of the elaboration of target-oriented programmes may be distinguished.

1. 1976–1978. Then it seemed that target-oriented programmes meant a new way of planning cooperation "on the basis of extensive methods of production integration" as against the "exploration of reserves inherent in planning cooperation outlined in the Complex Programme, but practically not tested yet", i.e. a long-term comparison through

balance drawn up in physical terms of needs with the means serving for meeting these needs and similarly defined in physical terms [31]. In other words – as it has been also explicitly formulated by others – as a matter of fact the practice of investment contributions would have been multiplied and extended as regards both instruments and methods [32, 33].

It may be seen from the methodological description of the plan of multilateral integration measures that there will be a conflict between national and international planning, if the aforementioned large-scale extension of the practice of joint investment projects takes place. Namely, if target-oriented programmes are aimed at sectoral optimum at international level, the problem will immediately arise that this is not identical with sectoral projections of national economic optimum. Thus it is no wonder that debates on the relationship between national and international optimum started in the early 1960s have been renewed [34, 35].

At the same time, other authors correctly called attention – on the basis of great inter-state development programmes realized in Western Europe – to the fact that "though each great programme had clearly determined objectives, the strategy applied was often confused and did not rely on any technical-scientific and industrial policy. Development of international relations realized according to the objectives of great programmes encountered obstacles connected with *the industrial stucture of the majority of Western countries and difficulties concomitant with the introduction of new technologies. Results of the activity* based on strategies adopted in the framework of great programmes *could be felt only very slowly* and it is too early to evaluate them from technical and economic viewpoints as yet." [36] (emphasis added – L. Cs.).

Resulting from all this it is not surprising that, formulating the real interests of the member-countries, the 1978 session of the CMEA held in Bucharest did not take exaggerated proposals formulated in the individual drafts of programmes into consideration and defined the content of target-oriented programmes as follows. A target-oriented programme is a joint long-term international plan document, according to its content a skeleton agreement, where subjects to be elaborated in the framework of joint planning are indentified. On this basis programmes are divided into subprogrammes that are then formulated in concrete terms in multilateral and *bilateral inter-state agreements.* Therefore, target-oriented programmes do not mean any alternative to the system of plan coordination, what is more they are realized in the framework of plan coordination in such a way that volumes of mutual deliveries realized in the framework of target-oriented programmes are determined in consideration of annual trade agreements and balances of bilateral payments [37, 38].

It is clear in the knowledge of the methodology of long-term target-oriented cooperation programmes that there is no question of jointly optimizing individual sectors of the individual countries, "as if they were parts of one national economy" [39] or – according to a previous formulation – a magnified version of agreements on investment contribution. This is not possible if only, because long-term plan proposals do not refer to the concrete assortment of mutual exchange, since this assortment could hardly be

determined with adequate accuracy for 10–15 years ahead with the majority of products [40]. Similarly, there is no question that the realization of these programmes would involve an enormous international flow of assets, either, though a part of the literature produced such expectations even after the 32nd (Bucharest) Session [41].

2. Therefore, it is justified to consider the resolution adopted at the 1978 Bucharest Session as the end of a stage and to reckon from here the second stage of the elaboration of long-term target-oriented programmes, lasting until 1981. This follows, after all, from the planning methodology of target-oriented programes elaborated after the Bucharest Session of the CMEA [42].

Long-term target-oriented cooperation programmes of the CMEA – as distinct from target-oriented programmes elaborated within the individual countries – do not contain a quantitative concrete definition of objectives, and this holds mostly also for the blocks of resources. This is an important difference, since at the time of the approval of national programmes, manpower, the material and financial resources, the term of execution and those responsible for it are already known from the very beginning and mutually coordinated beside the objectives determined. Since the distribution of resources is made by national planning agencies and is a function of priorities established by them, thus the resource side of any integration measure may only be ensured on the basis of agreements concluded between countries. Thus bilateral and multilateral agreements exactly contain the term, assortment of deliveries, penalties for non-fulfilment, etc.

As to the *resource side* of long-term target-oriented programmes, it may be elaborated *only at national economic level,* depending on the participation of the given country in the given target-oriented programme. After the economic policy consultations *national* agencies have a decisive part, since they decide on investment coordination, ownership, terms of construction and the breaking down of tasks for 1981–1985, and then for the individual years.

While the integration chapter of national economic plans reflects inter-state agreements already concluded, the target-oriented programmes appear in the period of plan preparation with conceptual character in the course of drafting agreements and contracts. Over and beyond this the target-oriented programmes are summarizing documents of system character of various integration measures.

Thus, in the realization of long-term target-oriented cooperation programmes economic policy consultations, and specialization and cooperation agreements connected mainly with the practice of bilateral plan coordination will have the most important part. It follows, that the successful realization of target-oriented programmes does not substitute for, but precisely requires qualitative changes in financial elements and mechanism elements over and beyond the sphere of finances (e.g. giving the right for decisionmaking to the enterprises, elimination of the rigid separation of producing and foreign trade spheres, etc.).

Development of commodity and money (market) relations

According to the general formulation of economic literature this field "is lagging behind others". However, it must be clearly seen that an adequate system of financial settlement exercising active effects and calling to account also for the meeting of obligations can be easily found from the viewpoint of financial techniques. But the essence of the issue lies in what and at what rate the individual countries are willing to undertake in relations between each other as regards reduction of the extent of mutual protectionism [43].

It is expedient to keep in view as well that the monetary-financial sphere is not able to surmount these problems alone. The methods and tools of planning and organization of economic relations prevailing at present among CMEA countries constitute a uniform, complex system. The international monetary system of the CMEA (its international currency, system of settlements, international credit granting) cannot be torn out of this entire system. The present setup of the coordinated methods and tools of integration are *given conditions* and *limiting factors* from the viewpoint of the system of settlements and credit granting of the CMEA that are unable to transcend [44].

As it has already been mentioned in the introductory part, the role of finances within the CMEA community is determined basically by the domestic economic mechanism of the member countries. The practice of economic control and management of European CMEA countries was characterized by recentralization processes in the 1970s. This manifested itself in priority given to indicators defined in physical terms (quantity, assortment etc.) against synthetic value indicators of efficiency. The fundamental autarky of the price systems of member countries was maintained, that is, a practice of price formation starting from the unconditional acknowledgement of real national prime costs and relying on sectoral average costs. Rearrangement of domestic prices followed that of relative world market prices only with a delay and partially. Attempts made to develop organic relations between external and domestic markets were gradually pushed into the background, too, by the fact that in the control of external economy regulatory elements which reflected the priority of the protection of the domestic market, i.e. its isolation, had come to the fore in each member country [45].

These real economic and regulatory conditions determined the possibilities for realizing the concepts formulated in the monetary chapter of the Comprehensive Programme. This chapter of the Comprehensive Programme postulates further development of the domestic mechanisms towards activation of market relations that has not been realized, after all. In consequence, financial technical solutions enabling a change-over to an international system of relations between regulated market economies and ensuring explicitly a transition, respectively, have simply lost their function. In the system of inter-state relations of centralized economies based on the breaking down of plans there was neither interest, nor demand, nor possibility to realize the solutions envisaged by the programme. Let us consider in the following the four groups of subjects in whose fields

the Comprehensive Programme – and a part of economists referring to it, respectively – expected or proposed a progress of reform character in the 1970s.

I. *Realization of the effective transferability and convertibility of the common currency.* In consequence of domestic economic developments bilateralism has been maintained and even further strengthened in contractual relations as well as in planning, foreign trade, accounting and credit, while demand and supply relations continued to manifest themselves first of all in the hardness or softness of goods. In consequence of balance-of-payments difficulties and of problems of domestic markets, parallel shortages increased, occassionally there were shortfalls even with significant items of great commercial policy importance. Under such circumstances – despite the shift to the sliding price basis – contractual prices expressed in transferable rouble could not ensure enforcement of the mutual interests of commodity producers. These prices ought to transmit and reflect mutual advantages, but member countries doubt this and the practical manifestation of these doubts was precisely that the articles most demanded for – and delivery increments of these articles, respectively –, were excluded from the traditional trade and purchasing them was possible only in the framework of special "constructions". Application of the investment contributions already mentioned would have hardly become necessary if prices expressed in transferable rouble had ensured adequate efficiency of foreign trade and accumulation possibilities for all fuel producers, nor would have been increments of agricultural products settled in free currency, if prices fixed in transferable rouble allowed an objective accounting acceptable for everybody.

In consequence of all this also the hardening of terms in mutual trade could be realized only with tools other than prices, by increasing determination in physical terms, by strengthening "linked buying" and bilateralism in the mutual trade settled in transferable rouble. (In order to simplify intermediate trade already amounting to 10 per cent of the total turnover of Hungary's trade with CMEA partners* this increment is settled in convertible currency. This would not have been possible in the traditional system so this development is to be evaluated as a manifestation of sober pragmatism.

In *this system of conditions* of development an application of value quotas, of multiclearing or, popularization of proposals aimed at the real transferability and even external convertibility of the transferable rouble, meaning the same from the side of settlement techniques, may seem a little anachronistic in recent Hungarian economic literature [46, 47, 48, 49, 50, 51]. Since under contemporary conditions nobody is interested in offering, for example in the framework of multi-clearing, a hard article, because it may not be known in advance for sure from whom, how much and how hard goods will be obtained against it, not to speak about terms of delivery. And, without a multilateral flow of commodities money cannot be transferred. External convertibility might only be realized after the intra-regional, effective multilaterality (and all related conditions of economic organization and competitiveness) have been achieved, but this does not seem a real possibility within a reasonable time.**

*In 1981 this share grew to 17 per cent.

**A similar standpoint is taken by Imre *Vincze* [44] and Kálmán *Pécsi* [31].

II. *Uniform rate of exchange.* This objective may be a typical example for the targets of the Comprehensive Programme serving transition and change-over. Its achievement postulates that member-countries evaluate exports and imports uniformly in the entire national economy (despite contradictory interests connected with the stimulation of export and protection of the price level), otherwise it makes no sense, furthermore, that this rate functions as a *factor determining prices and income positions as well as investment possibilities and decisions.* This is the financial-technical precondition of the convertibility of currencies, but, on the other hand, it assumes independent enterprise decisions concerning export and import as well as investment and – last but not least – a normative regulation consistently enforced also in other fields of the national economy. Namely, in an opposite case it is unjustified to select only one of the financial regulators of external economy and formulate the requirement of uniformity only towards this. Namely, if a differentiated development- and income-regulation, furthermore, a practically autarkic price system are functioning in the entire economy, then these determine the exchange rate possibilities in a sense that foreign economic effects produced by a truly uniform rate of exchange are disfunctional in the given system (because they disturb the realization of processes planned in physical terms) so they have to be neutralized by means of "financial bridges" and the system of income regulation. Without this, financial processes unjustied (unplanned) from the viewpoint of the entirety of the aforementioned system of control and management would be going on.

More closely, from the financial technical aspect the problem of uniform rate of exchange may be formulated so that, *since* the transferable rouble is not a uniform and multilateral equivalent in all relations, and also the structures of the formation of domestic prices and price mechanisms are different, there is no possibility at present to introduce a uniform rate of exchange of national currencies, because for this not only conditions of financial character and of the domestic economy would be required [52].

III. *Exchangeability of national currencies to each other and to transferable rouble.* This problem arises directly with joint investments, joint enterprises and non-commercial rates of exchange where, after all, non-convertible currencies are converted to each other and to the transferable rouble (in the course of settling non-commercial balances and materials delivered, services, wages as investment contribution).

Here several unsolved problems result from the fact that the consumption structure of diplomats serves for the basis of settlement instead of that of tourists (though this latter would be more proper at present), that it contains such items whose consumption is not usual in international tourism (sugar, fat, etc.) and finally, it does not reflect the level of market supply directly not measurable in the consumer prices of the individual countries (technically, amounting to the same as if certain items had not been taken into consideration at real prices or with real weights, respectively, in the basket). The practice of joint investments also indicates that – apart from the plan of multilateral integration measures – different accounting methods are applied in each joint venture. Over and beyond this, serious problems are caused by the fact that the utilization of assets accumulated in CMEA international tourism is not solved. Since in tourism partly

consumer goods in short supply also in domestic markets and infrastructural establishments congested also domestically are "realized", and sources of accumulation to be used for the development of these establishments are limited, the situation can not be maintained any more that export realized through tourism has become practically a form of mutual sacrifices. It should be ensured that assets resulting from tourism are paid off unambiguously with hard goods and/or convertible currency, by the countries concerned, lest such monetary and administrative restrictions should be applied as e.g. the Romanian measures taken in August, 1979 (sale of petrol to CMEA-citizens only against convertible currency) and prohibitive restrictions in Polish–GDR tourism relations in force since the first months of 1980.

The importance of this issue is well indicated by the fact that in 1979 tourism was placed second, following oil export, in the total export of the countries of the world. Over and beyond this it seems that, because of the unsolved character of non-commercial payments, liberalization measures taken during the last decade in tourism among CMEA-countries are on the way to be withdrawn. That would make the overall political objective of approximating the socialist countries to each other more difficult to realize through a practice affecting millions of citizens. This problem would at least partly be solved – with the parallel elimination of the immanent contradiction in any artifically calculated (established) rate of exchange *computed* on the basis of any basket, i.e. indifference to demand – if in the course of establishing of coefficients in the non-commercial sphere functioning as real rates of exchange (influencing decisions and income relations) also at present a wider scope were given to the demand and supply relations [53]. Thus the exchange of national currencies into each other would have an objective basis and could be determined much more simply.

IV. *Direct inter-enterprise relations.* This question has two elements: (a) whether the economic (producing) unit has the right to enter into production and sales relationship with the producing unit of other member-countries, (b) whether this unit can unambiguously decide both for itself and for the national economy if it is interested in a given business and if so, to what extent.

Experiences of recent years indicate that the *latter* problem is of decisive importance. Namely, even in cases when state management explicitly stimulates, what is more, obliges economic units to enter into international cooperation (joint investments, CMEA international economic associations), the enterprises can, as a matter of fact, not cooperate at all or only as a result of lengthy computations and compromises, since costs and results of the cooperation can not be unambiguously computed. The fundamental problem is caused here, apart from the separation of external and domestic price systems, by the deviating structures of the domestic price systems, because of which domestic production costs cannot serve as a basis of inter-enterprise (or commercial) relations in the framework of CMEA-cooperation, neither in principle, nor in practice to any extent.

Therefore, O. T. *Bogomolov*'s statement may be agreed upon [54] according to which if the internal trade of CMEA equals only 6 per cent of world trade then no separate regional value will develop, nor is there any other practical basis for price

formation than prices of the remaining 94 per cent, mainly when purchasing in the framework of East–West trade is a real alternative for the partners. It may also be agreed upon that while with raw materials the notion of world market price is unambiguous, it is much less exactly determinable with finished goods and mainly with productive spare parts and units, so much the more because a considerable part of this turnover is realized within the enterprise, at accounting prices. However, it may hardly become a viable solution on the basis of the foregoing if cooperation in spare parts and partial units within the CMEA were determined on the basis of domestic wholesale prices and with their consideration, respectively, since these wholesale prices contain various cost elements to a deviating extent and different net income elements are added to them in the individual sectors. Beside deviating taxation of the individual stages, individual cost items – e.g. research-development, geological prospecting, etc. – are accounted at various places, thus wholesale prices do not mean the same in each country and can not even be compared with each other. It may only be rendered probable in the knowledge of nominal price levels that this proposal – and also other ones voiced by Soviet economists already for several years, but identical with it in their contents – formulates first of all the direct commercial interests of net machine importers.

The question may then be raised with good reason why no progress could be made towards realization of the monetary and financial chapter of the Comprehensive Programme, if so many factors speak in favour of the development and activation of commodity and money (market) relations and this requirement had already been formulated by the member countries more than ten years ago? Over and beyond the conditions of internal economic mechanism already mentioned in the foregoing, a comprehensive reform of the CMEA mechanism is impeded also by individual, group and organizational interests attached to established structures, as the late Academician István *Friss* pointed out [55]. Most important among them are protectionism aimed at the defence of uncompetitive big enterprises, resistance of countries to the realization of structural adjustment of investments and capacities. In the decade analyzed above *practice* of economic policy in CMEA-states did not realize the necessity of suppressing uneconomical units and was more willing to suffer future losses for present security, and to maintain the structure existing already at obviously high costs (and even losses) than to undertake at present conflicts, concomitant with breaking up the structure in the interest of future financial results [56, 57, 58].

Towards convertibility of the national currencies

Convertibility of the national currency was declared by several socialist countries as a goal and except for Albania and the GDR this requirement was formulated in each European socialist country. Convertibility of the currency brings about tangible advantages by stimulating for the utilization of advantages resulting from multilateral organization of the international division of labour and a more direct transplantation into the domestic economy of world market standards and requirements of competitiveness that

stimulate for a considerable improvement of efficiency. This would be a real help in promoting the realization of the objective formulated in several member countries, namely, adjustment to new world economic conditions. Finally, the increasing globalization process of the international division of labour would be transmitted from the financial side including intensifying exchange of activities and interaction and also interrelationship between the two main markets.

Creating the real financial convertibility of currencies is not an objective, but a tool of economic, political and mechanism measures aimed at increasing the efficiency of joining into the international division of labour, it is so to say a concentrated expression of these. It is very important to emphasize that not the financial liberalization to be attained means the highest value in the interest of which overall measures ought to be taken in the socialist economy, but an overall reform of the economic mechanism is necessitated – as it turns out in the foregoing – by the transformation of the domestic and external conditions of East European countries, by the intensive and world-market-oriented management methods required by the new stage of economic growth. The problem is precisely the *overcoming* of consequences of economic policies *followed in the socialist countries up to now,* namely, that they controlled their monetary systems and the connected value and price systems typically as *domestic* systems [59] (emphasis added – L. Cs.).

A change-over to the application of convertible currency would not increase but reduce the uncertainties in the planning of foreign trade *existing also at present* but turning out usually only later on when reports are made. At the same time, it is also clear that if products are distributed generally by the centre and in physical terms, including the system of detailed quotas defined in terms of value, then convertibility makes no sense. The system of economic control and management should not raise obstacles to the utilization and spending of money [60]. It is expedient to point out again that a real convertibility of currencies has also economic policy (and not only mechanism) conditions (consistent export orientation).

The general use of convertible currency would promote solution of the settlement problems still existing between socialist countries. Therefore, it is a common interest of socialist countries to mutually support each other's endeavours in this direction both politically and economically. Thus (more developed, European) CMEA-countries interested in the realization of convertibility could advance gradually, in consideration of and relying on each other's experiences and could help each other simultaneously also in global international monetary cooperation.

The development and functioning of convertible socialist currencies would largely promote, from the practical aspect, cooperation on third markets and joint production and sales for demands of third markets, a field of CMEA-cooperation most promising under the new world economic conditions. At the same time, this would solve the fundamental problem – as distinct from the development of the transferable rouble – that CMEA member countries outside Europe (and partly the potential ones) are not interested in the general and indifferentiated hardening of terms of payment of the

CMEA, thus in proposals aimed at this (as e.g. settling balances, interests or at least a part of them in convertible currency) are not likely to become a factor determining the main line of practice in the future, either.

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ПЛАНИРОВАНИЕ И ВАЛЮТНО-ФИНАНСОВЫЕ ОТНОШЕНИЯ СТРАН СЭВ ДЕСЯТЬ ЛЕТ СПУСТЯ ПРИНЯТИЯ КОМПЛЕКСНОЙ ПРОГРАММЫ РАЗВИТИЯ СОЦИАЛИСТИЧЕСКОЙ ИНТЕГРАЦИИ

Л. ЧАБА

В истекшее десятилетие коллективная валюта стран-членов СЭВ, несмотря на устремления, сформулированные в Комплексной программе, осталась единицей двусторонних расчетов. Автор анализирует причины этого положения. Он рассматривает сперва развертывание внешнеэкономических связей с мировым рынком, происходившее параллельно с рецентрализацией управления национальными экономиками. Затем дается обзор в историческом и экономическом аспекте новых моментов сотрудничества в области планирования, в пеьвую очередь формирования долгосрочных целевых программ сотрудничества. Автор указывает, что эта форма является не альтернативой, а подчиненной частью двустороннего координирования народнохозяйственных планов. Наконец, анализируются товарно-денежные отношения и причипы невыполнения «переходных» по своему характеру финансово-денежпых мероприятий, предусмотренных в Комплексной программе. Автор отмечает, что при сложившихся тенденциях развития механизма сотрудничества они стали чужеродным телом во всей совокупности сотрудничества стран СЭВ. В заключение автор рассматривает возможности и условия конвертируемости национальной валюты одной из стран-членов СЭВ.

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REVIEWS

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ENERGY PROBLEMS IN THE HUNGARIAN AGRICULTURE AND FOOD INDUSTRY*

On research concerning the economics of energy

The most important objective of the research project reviewed was to further the exploration of the economic policy problems of the utilization of domestic natural resources, contributing thereby to the scientific preparation of macroeconomic decisions aimed at this spere. Concerning the requirements of the complex treatment of the subject we now refer to two of them. One is that both sides of the balance of energy should be treated as being of equal in rank; the other is that by the replacement of energy import not only the efficiency of domestic energy production has to be regarded as determinative but also those export capacities should be investigated which can be developed as alternatives to the other branches of economy.

Agriculture as a user of primary energy in a long run, and as potential producer of biomass as well becomes interested in the optimal utilization of the poorly available mineral primary energy in a long run only through intermediate "channels" (prices, subsidies etc.) of the system of economic management. Setting out from this relationship which was proved already so often by the practice, we developed those methodological devices with whose application we performed the energy analysis of domestic agriculture and of the food industry.

The energy demand of industrializing agriculture

The products of Hungarian food economy** play an important part in the consumption of inland population and in the improvement of the foreign trade balance. This double task will remain prevailing in the whole period until the year 2000. In order to achieve these tasks the rapid rate of production growth should be maintained also in the

*The research work whereupon this paper is based was initiated in 1979 and organized by the Institute of Economics of the Hungarian Academy of Sciences.

**Food economy in this context comprises both agriculture and the food industry. Beside the authors also Sándor *Balogh*, János *Dinnyés*, Károly *Kocsis*, József *Ruppert*, Imre *Szániel* took part in the research. The paper was presented at the Third Congress of the European Association of Agricultural Economists. Belgrade, 31 August–4 Sept. 1981.

future (the average annual increase of agricultural production was 4.6 per cent between 1966/70 and 1978 in Hungary and this ranks the country to the first place among 17 European countries).

In the forthcoming two decades the conditions of economic growth will significantly alter for agriculture and, respectively, for the food economy. So the production increase of foodstuffs and the improvement of their quality should be attained in new ways and by means of new methods. We may also say that the course of economic growth and of food production should be modified. An important part of this sphere of problems is investigated in our paper: the most important interrelations between energy and foodstuffs are outlined on the basis of experience gained in the 70's, casting a glance also on the forthcoming two decades.

In the 70's it was the joint effect of several factors which rendered the rapid economic growth possible in Hungarian agriculture. One of them was represented by fuels abundantly available at relatively low prices. The annual average rate of increase of direct energy consumption amounted to 9.3 per cent between 1970 and 1978. This means that in the course of 8 years energy consumption grew by 104 per cent in the agriculture while the average increase was only 37 per cent for the whole national economy. (Among the other branches of the national economy it was only the chemical industry where the rate of increase of energy consumption was equal to the same in agriculture.) If the rate of increase of energy consumption in agriculture continued to remain at this level until the turn of the millenium, then the energy consumption of agriculture would amount to about 12 million tonnes of fuel-oil-equivalent in 2000 which would exceed the present total mineral oil consumption of the Hungarian national economy.

It is an important characteristic of the energy consumption in agriculture that its rapid increase proceeded on the basis hydrocarbons. At the beginning of the 70's liquid hydrocarbons, which were still very cheap at that time, worked their way into the technological system of agricultural production. The machine-building industry delivered also mainly energetic machines suitable for liquid hydrocarbon heating. . Thus, in connection with the afore said it is comprehensible that liquid hydrocarbons are dominating within the energy consumption of agriculture (their share being about 84 per cent).

The rapid economic growth in Hungary was expressed also through the extension of the sphere of activity of agriculture. One of the development characteristics of the 70's was the evolving of the three-polar sphere of activity of agriculture. In 1978 already 22 per cent of the agricultural gross production was produced by the sphere of non-basic activities (other than crop growing and livestock husbandry) and only about 1.3 million tonnes of fuel-oil-equivalent fell to the "basic activities" from the total consumption of 1.7 million tonnes of fuel-oil-equivalent in agriculture.

One of the factors motivating the increase of energy consumption was the 18 per cent decrease of the economically active population in the Hungarian agriculture of the 1970's as well as the belated response of the economic management system of the country to the world market price explosion of primary energy.

The direct energy demand of agricultural production increased by 74 per cent (at current prices) respectively by 16 per cent (in Joules) in the course of the investigated period. This "twofold" examination of the energy demand indicates that the price advance of agricultural products did not keep abreast with the rising fuel prices. International investigations cast light upon the fact that both on a world scale and in certain areas agriculture uses only a very small part (3–6 per cent according to data of the year 1972) of all industrially produced energy. The data demonstrate that in Hungary the contribution of agriculture to the national income is significantly higher than its (percentual) share within the energy consumption of the national economy.

By the end of the 1970's, qualitative changes began in Hungary in respect of the foodstuff-energy relations whereby several tensions rose to the surface and became aggravated. The value of the food export represented in 1972 more than 45 million tonnes of mineral oil; in 1978, however, it represented only 24 million tonnes of mineral oil although the value of the food export increased by more than 60 per cent in the meanwhile.

Data on costs also indicate aggravation of the tension. The rapid growth of the per unit energy costs of agricultural production was replaced in the years 1978–1980 by stagnation, but the fact that the energy part of costs is further increasing still remains a warning signal. In the period between the years 1971/73 and 1978/80 the share of energy costs within the total costs of production grew from 7.2 per cent to 7.9 per cent in the case of wheat, from 8.3 to 9.7 per cent in the case of corn, from 6.4 to 8.7 per cent in that of pork production and from 7.2 to 8.8 per cent in that of broiler chicken. It is to be added to the comparison of the three-year average data that the ratio of energy cost exceeded in 1980 already everywhere 10 per cent with all the above mentioned products.

The increase of the energy costs is of a rapid rate also in the food industry. Compared to the sum of about 3.2 thousand million Ft in 1977, energy costs represent 6.3 thousand million Ft in 1980, i.e. an increase by about 90 per cent. The increase is rapid – because of the shift of prices taken place during that time – also between 1979 and 1980. The ratio of energy costs grew from 3.0 to 4.52 per cent for sunflower oil, from 5.1 to almost 8 per cent for granulated sugar, from 8.6 to almost 11 per cent for tinned green-peas and from 0.9 to 1.2 per cent for the carcass.

Hungary would be able to take part in the satisfaction of agricultural and food import demands of the CMEA countries to an increased extent in the future. To this end, however, the establishment of such conditions favourable for the parties concerned is needed which provide greater incentive for the development of domestic production.

As a consequence of the qualitative changes in the energy and food relations outlined above it is an economic political necessity in Hungary that the increase in the production of foodstuffs must be implemented simultaneously with a modification of the course of energy management. Economy is to be practised mainly in respect of purchased energies to reduce thereby the increase in the prices of foodstuffs and of other agricultural products. For the same reason energy consumption should be reduced also in the storage, processing, transport, distribution and trade of agricultural products.

Agricultural technologies are in a stage of radical transformation in our age and there are still large opportunities for the propagation of production processes demanding less energy. This is so also in the case of Hungarian agriculture. There is a chance to slow down the increase of the energy demand coefficients. The related tasks can be grouped into two large categories. The one is maintenance of the optimum level of energy material inputs needed for the turning out of agricultural final products. The other is that efforts should be made for the continuous replacement of liquid hydrocarbons as fuels. To solve this "twofold task" is not the job of agriculture only, but it infers also the services performed by the related industrial sectors for the same end.

The increase of food production can be implemented only through the raising of energy consumption. According to long-term forecasts (like the Leontief-report e.g.) the production of grain crops should be increased at an annual rate of 4 per cent and that of animal products at an annual rate of 3.5 per cent all over the world, so that the food (supply) problem of the world could be solved. According to the same source the annual rate of increase of mineral oil consumption will be expectably by one and a half-two times as high in the developed and two times as high in the developing countries as the rate of increase of food consumption. It can be expected also in Hungary that the energy demand of food production will increase at a slow rate.

The relationship between food and energy as reflected in efficiency

The long-term complex energy rationalization project of Hungarian agriculture summarizes the characteristics of energy consumption in the Hungarian food economy.

According to our estimates the energy demand of Hungarian agriculture will represent, as a result of the "course modification" – assuming an average annual rate of increase of 2 per cent – about 3 million tonnes of oil equivalent in the year 2000, i.e. about 120–130 PJ-s. The same figure will be, taking an annual rate of increase of 3 per cent into account, approximately 70 PJ for the food industry.

Our estimates also demonstrate that the two thirds share of agriculture within energy consumption will remain representative for the food economy in the course of the two forthcoming decades.

Another characteristic is that the increasing share of the food economy within the total energy consumption of the national economy will reverse sign and will turn into diminishing. Thus this share will expectably range betwen 8 and 10 per cent for the year 2000.

How to achieve the diminishing share of food economy within the total energy consuption? To answer the question a growing number of scientific researches and investigations examine the interrelations between energy consumption and the systems of food production and they will be normative for the optimal functioning of agriculture within the national (global) energy systems.

Table 1
The share and distribution of energy consumption of the food economy in Hungary
(actual data for 1978 estimated for 2000)

Item	Years		
	1970	1978	2000
The share of agriculture within the food economy total	58	66	65
The share of food industry within the food economy total	42	34	35
The share of food economy within the national economy total	8.4	11	9

Source: Ref. [4]

There may occur namely – even if having a peripheric character for the time being and many a time only in the phase of research – among the foodstuffs and primary energy materials certain relations of substitution. Firstly, agricultural raw materials can be transformed into both foodstuffs and energy; secondly, foodstuffs can be produced by using certain primary energy, and thirdly, most recently also the transformation of foodstuffs suitable for human consumption into sources of energy was put on the agenda.

According to certain world economy forecasts the utilization of biomass for energetic purposes may assume such proportions that certain agrarian exporter countries will be able in the long term to cover the entire energy demand of the agricultural sector. This can be brought into connection with the significant role of price relations and with their drastic modifications. The optimum arrangement of Hungarian agriculture within the national energy system is highly influenced by the price relations prevailing in the foreign trade of the CMEA member countries. The setting of such an objective for the Hungarian agriculture cannot be considered as purposeful. Taking the socio-economic structure of the country into consideration, the production of foodstuffs can be indicated also for a long term as a fundamental function of the food economy. This is, however, to be implemented parallel with the experimenting with and propagation of energy saving technologies as well as with the economic utilization of thermal energy of a part of the by-products.

The production systems of agriculture can be interpreted also as systems of energy transformation. Analyses related to the efficiency of energy are organically joining the general efficiency investigations and form a special part of them. Their importance is particularly increased at present since they study the utilization of energy, this element of the reproductive forces which is available poorly and in a limited manner. Full-scope energy analyses usually reflect at the same time natural relations and they can only restrictedly embrace the political economic relations of the input-output ratios. Therefore

the energy analysis can be inserted into the existing system of efficiency investigation as an enrichment of the analysis of input-output relations; it is purposeful to think both in the "Joule" and in the "price dimensions". The relation between the two types of energy efficiency and their utilization for economic policy, however, are not yet ecactly explained.

The investigations refer to several factors or groups of factors which exert significant influence upon the development of the input-output relations expressed in terms of energy, i.e. of the transformation rate. Here and now we call the attention to only one single factor. One of the greatest reserves for the favourable development of energy transformation efficacity in agriculture (in livestock husbandry) is the improvement of feed utilization. Feed utilization computed in diverse model calculations proves to be by about 18 per cent better than the real average in agriculture. There is a very large dispersion among the farming enterprises in respect of the utilization level of food energy and protein. By diminishing it there may arise an opportunity for some 15–20 per cent improvement of the energetic efficiency in livestock husbandry.

In the course of investigations concerning the interrelations between food production and energy it is moreover justified to refer to the relations existing between energy costs, production costs and export prices. We carried out investigation in respect of four markedly significant products of food economy. In the case of wheat, corn, pigs and broiler chicken, the average increase of the export prices for the years 1971/73 and 1978/80 generally and practically covered – if sometimes incompletely and sometimes to an overcompensated extent – the increase of per unit production costs including, of course, also the energy costs. We think it is important to stress here – and data of the year 1980 most categorically remind us of it – that the rapid increase of the energy costs restrains the growth of food production and slows down all over the world the solving of the food (supply) problem.

The new qualitative characteristics of the energy problem do not require only a modification of the course in the sphere of production but they set forth certain interrelations more and more markedly even in the sphere of consumption.

The level of animal protein food consumption in Hungary reached in 1970, namely, the maximum corresponding to the conditions of life (daily 40 g, i.e. annually 14.6 kg per head) and the development which took place since then (54 g and 19.7 kg respectively in 1978) imposes a burden of "luxury consumption" upon the balances of energy and of foreign exchange of this country. This additional consumption of 5 kg protein required, assuming that the structure of animal product consumption of 1978 continued to prevail, an additional import of protein fodder for $ 72 million and the consumption of primary energy corresponding to 100 thousand tonnes of mineral-oil (of about $ 10 million value). As a consequence of its structure, the animal protein consumption requires also extraordinarily much of primary energy and foreign currency. The consumption ratio of proteins contained in poultry meat, pork and eggs which use very much of primary energy and foreign currency represented 60 per cent in 1978 and the same of milk and beef proteins represented 37 per cent. At the 1978 year's level of animal protein

consumption, merely the increase of milk and beef protein consumption (annually 240 litre per capita milk and dairy products as well as 15 kg per capita beef consumption) and the diminishing of poultry and pig husbandry products by the same percentage would render possible the saving of $ 100 million fodder imports as well as of primary energy corresponding to 140 thousand tonnes of mineral oil ($ 13 million).

It results from the above analysis that the increase of cattle breeding products is justified and the tendency of rendering poultry meet and pork consumption relatively more expensive by means of consumer's price policy measures is expedient. In a given period, however, it is reasonable to decide about the extension or restriction of poultry meat and of pork for export purposes so that the accumulated import demand (forage production, import of feedstuffs) of the producer "verticum", the export capacity and export price of domestic fodders feeded as well as the world market prices of poultry and pig breeding products should be pondered over at the same time.

Expectable energy consumption at the turn of the millenium in Hungarian agriculture

Our investigation involved also estimations for the future energy consumption, i.e. its level in 2000. Estimations – as shown in *Table 2* – were carried out in five versions.

Table 2
Energy consumption of agriculture in Hungary

Year	in PJ	in oil-equivalent (million tonnes)
1970	35.0	0.8
1975	59.8	1.4
1978	71.2	1.7
1980	71.2	1.7
2000 "A" version	504.7	12.0
2000 "B" version	190.4	4.5
2000 "C" version	146.7	3.5
2000 "D" version	125.7	3.0
2000 "E" version	113.1	2.1

Source: Ref. [4]

Version "A" based upon the rate between 1970–1980 (9.3%) is destined merely to astonish us: what would be the outcome if the energy consumption of agriculture increased in the future also at the same rate as did between 1970 and 1980. In this case

Hungarian agriculture alone would consume more fuel-oil energy than the whole quantity representing the mineral-oil consumption of the Hungarian national economy in the last years of the 1970's.

Version "B" based upon the rate between 1975–1980 (4.7%), was constructed upon the assumption of an expectable increase of energy consumption. Its result is 4.5 million tonnes of fuel-oil equivalent for the year 2000. This can neither be regarded as realistic but compared to version "A" it renders perceptible how great a difference exists in respect of energy consumption of agriculture between the first and second halves of the 1970's.

Version "C" which assumes a 2 per cent growth of agricultural production, based upon technologies prevailing at present can be considered as a pessimistic one. It relies on the assumption that the rationalization project of energy will only exert a moderate effect on agriculture even in the long term, present technologies will continue to function with small modifications only and the per unit energy demand of production will be higher by the turn of the millenium than it was in 1980.

Version "D" with its 2 per cent annual growth of agricultural production and with a more moderate increase of energy demand is the one which is most realistic. It sets out from the idea that the energy rationalization project will be successfully implemented and the per unit energy demand of agriculture will but moderately increase. (It will be by about 11 per cent higher for 2000 than it was in 1980.) We think that the factors acting for the increase of the global energy demand of agricultural production (extension of production, rise of the technical level, increase of intensity, growing transport demands, further mechanization of hard manual labour, fulfilment of environmental protection requirements, inevitable growth of the energy demand of small-scale production in the long term, increase of energy prices . . . etc.) will expectably more vigorously assert themselves than the factors working towards the reduction of energy demand (improvement of the efficiency coefficient of mechanical and technological energy transformation, energy saving technologies, certain modifications of the production structure, measures for energy saving and rationalization etc.) do and thus the global energy demand of agriculture will increase to a greater extent than to which the expansion of production advances.

We stress here, however, that the intention that the global energy demand of agriculture should rise to only about 3.0 million tonnes of fuel-oil equivalent until the turn of the millenium and therein the part of liquid hydrocarbons should not surpass the quantity of 2 million tonnes can only be implemented as a joint result of carefully prepared and very well coordinated energy rationalization measures. The realization of this project, however, postulates costly and well concerted research and development activity and the general prevalence of a pool of energetic machines which require much more investment than so far.

To finish with we demonstrate the *version "E"* with an underlying 2 per cent annual growth of agricultural production with changed per unit energy demand. This version is, according to our present knowledge, the optimistic one. It reckons with the

assumption that we can not only moderate the rapidly increasing energy demand of agricultural production but also we shall be able to stop it. The per unit energy demand fluctuates or moves in this version around the data of the year 1980. For this version the conditions described in version "D" are true even at a highly increased rate and moreover, there is still an other condition that the number of labourers in agriculture should be reduced between 1980 and 2000 to a significantly smaller extent than it was from 1960 to 1980.

Opportunities in foreign trade and international cooperation

An ever increasing part of the surplus production of Hungarian food economy will be allotted for export. The geographical proximity to such a buyer's market which will presumably demand big quantities of grain, meat as well as fresh and processed horticultural products for a longer future period is undoubtedly advantageous. The Soviet Union presents a vast potential market for Hungarian foodstuffs. In case adequate incentive conditions are created, Hungary is able to take part to an increased extent also in the satisfaction of agricultural and food import demands of the other CMEA member countries.

The share of agricultural and food industrial products within Hungarian foreign trade with the West is relatively high (30 per cent). This share is of a diminishing trend but it will presumably remain significant for a long period even in the case if the export capacity of the food processing industry is rapidly improving. It is purposeful to render the food export directed to developed industrial countries more secure by the conclusion of long-term production and cooperation agreements. The diversity of Hungarian food exports can be maintained and even developed through the production of further new products.

The food exports to solvent developing countries can also be augmented. It is paying to initiate the delivery of complex agricultural production systems and food industrial capacities into these countries.

It is difficult to prognosticate the movement of world market prices but the forecast that the world market prices of foodstuffs will more rapidly increase in course of the two forthcoming decades than the price level of the manufactured products has a relatively high certainty. The raising of returns from export sales will develop in close connection with the way how the export structure will be able to adjust to the market requirements.

The Hungarian food export – calculated at constant prices – may grow in course of the forthcoming two decades and it can reach a level 2.5–3 times as high as at present. In addition to the establishment of the direct conditions of production this has considerable infrastructural (storage, transport etc.) consequences. Pork exports can be doubled in the forthcoming two decades. The export of non-perishable meat products can be enlarged in dependence on the market situation and the development possibilities of the processing

capacities. The export of slaughtered poultry may vary between broad limits depending upon the possibilities of economical exports.

Generally it would not be purposeful to increase the import of agricultural and food industrial products: the search for potential new supply sources and their utilization is, however, desirable.

The import demand of agricultural production and of food industrial processing can first of all be reduced by developing the domestic manufacturing of means of production and by improving efficiency. It is necessary that this internal market should be exploited also by the domestic industry. It must take initative in imparting a new impulse to the technological development of food production.

The biological elements of production development and energy saving should be acquired as starting points for domestic propagation from the results of inland research, from increasing cooperation performed with the CMEA member countries and also from the Western countries just as further agricultural and food industrial production processes, machines and chemicals which are efficient under Hungarian conditions.

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BOOK REVIEWS

BALASSA, Á.: *A magyar népgazdaság tervezésének alapjai* (Foundations of planning the Hungarian national economy.) Budapest, 1979. Közgazdasági és Jogi Könyvkiadó. 438 p.

Voluminous literature, numerous books and lecture notes by Hungarian and foreign authors have been published in Hungary on national economic planning and on the theoretical and practical problems of planned economy. However, our literature on planning shows a common uniformizing trait: "external" (with some exaggeration, schematic) treatment. Their authors, even of demanding works, scrutinize chapters of the national economic plan, the characteristics of their drawing-up or planning as a system (occasionally as a system of mathematical or perhaps verbal models).

Balassa breaks away from old traditions and treats planning in its economic policy context but from the viewpoint of an active planner. The practical knowledge of an experienced planner radiates through the lines and this, at the same time, provides empirical ground for his general theoretical statements. This "internal" approach is the highest merit of the book, this lends it novelty and this is the reason for its deficiencies as well. The first difficulty is that in this presentation, planning is necessarily reduced to the definition of basic interrelations of development and to working out the major objectives and instruments. Such categories of the foundations of economy-wide planning as the economic structure, planning its various levels, planning of external economic relations, or the contentual and technical problems of international plan coordination are not covered.

But let us first see what *is* contained in the book for that amounts to plenty and new knowledge equally useful for planning experts, economists interested in the subject, and for undergraduates studying planning.

This voluminous book is divided into seven big chapters. By its title *Chapter One* promises a review of interaction between economic policy and national economic planning. In fact it gives much more. It gives an exquisite and genuine discussion of the system of objectives and instruments of economic policy and the interdependence of its elements.

The author states (p. 18): "Economic policy is the ensemble of concepts, decisions and economic actions that determine the main objectives and directions of economic development and the major methods and means of progress in the main directions." Discussion is provoked by this definition in itself and is made absolutely unavoidable by its further explanation. Namely, Balassa holds that ". . . economic policy only tackles those cardinal problems of economic development the relevant decisions on which have important consequences not only for the economy but also for politics" (p. 18).

From both the definition and its explanation, the subject who administers the economic policy, namely, the actual state power and its system of institutions is missing. On the other hand, there are neither theoretical nor practical considerations that could justify the restriction of economic policy to economic phenomena implying important political consequences, as formulated in the quotation.

In the presentation of the object of economic policy and its relations with economy-wide planning the dual function of economic planning, ie., preparation of economic policy decisions and, subsequently, their concretization for the purpose of implementation, is clearly shown.

In the author's opinion there are four major objectives and three determining factors of economic policy.

The major objectives are the following ones: to consolidate the conditions of production; to develop the factors of production; to improve the standard of living, to strengthen the international economic relations. The *determining factors* are: economic growth, efficiency, equilibrium.

It is annoying that objectives are sometimes mentioned as constant elements, furthermore, that there is no mention of the systems quality of objectives, the hierarchy of objectives, and of the fact that objectives may simultaneously act as instruments.

It is found appropriate to make two comments on the elements of the economic policy. Firstly, I believe that the economic structure as an element closely linked with the three said ones and being in causal relationship with them should belong here as a fourth element. Secondly, by these elements not so much the economic policy but rather economic development is determined.

The interactions between growth, efficiency and equilibrium discussed in detail as well as the presentation of the relationship between them and the economic policy objectives are lasting values of the book.

The theoretical introduction is followed by a correct review of the Hungarian economy and economic policy. In the witty analysis into the core of the matter our development is divided into two main stages. Stage one lasts from the early fifties to the mid-sixties and the author distinguished within it the pre-1956 and the post-1956 periods. In the second stage beginning with the new economic mechanism he considers the price explosion of 1973–74 to be the line of demarcation.

Chapter one is concluded with the discussion of economic control stressing that is it a function first of all of economic-political orientation. The brief discussion by historical approach gives insight also into the discussions in the Soviet Union on the law of value and planning. It is regrettable that the author did not place the Hungarian reform of economic control into an international setting.

Chapter two deals with the system of economy-wide planning, starting with the component parts of the national economy. These are the following: organizations pursuing actual economic activity, communities of consumption (families) and the state.

It is a remarkable statement that the state's ". . . role played in the economy is increasingly difficult to describe as the function of a top power organization" (p. 1). Unfortunately, this statement is not proven sufficiently.

Ákos Balassa distinguishes the following elements of the system of national economic planning and in it the economy-wide planning and the planning of the state's central economic activity, as well as the planning of the economic activities of business organizations and the local economic activities of the state. He writes that planning is concerned with the development of economic processes, and this needs to be completed by stating that it is increasingly concerned with social processes too.

In the course of economy-wide planning the author finds it reasonable to plan the following economic processes: the rate and main proportions of the development of the economy, the development of scientific research, the development of production, the changes in external economic relations, the development of infrastructure, the development of manpower, the development of the standard of living, the shaping of price relations, the shaping of financial processes, the regional shaping of the main economic processes.

The idea given about planning the economic activity of the state is not that clear: the only definite point is that it includes economic processes planned with a view to decision-making, their system or regulators, as well as specific government tasks (from housing to defence), however, their actual content is not specified.

It is convincingly shown that since sectors (branches) cannot be regarded as objectively existing units detached within the national economy by economic and, in this context, interest relations, the existence of plans for ministries and sectors is not justified.

Chapter three reviews the general contents of economy-wide planning and the plans: the examination begins with the periods covered by planning, presenting the major characteristic features of long-term, medium-term and short-

term planning and plans as established in the socialist countries.

An ingenious proposition is made for the amendment of the planning system: it would be expedient to switch over to 20 or 25-year forecasts and to the system of ten-year, three-year and one-year economy-wide plans.

The following four different logical phases of economy-wide planning are distinguished: analysis, forecasts and hypotheses, concepts, and the detailed drawing up of the plan. This way a clear and bright idea is given of the essence of the process of planning.

However, the analysis is limited by the author to the assessment of past development and state. As a matter of fact, the analysis ought to cover the present, the international economic environment, as well as the implementation of earlier plans and economic decisions and the causal relationships between them.

The main fields of prognostication are factors beyond our decision and not the outcome of decisions taken in the framework of a given plan.

The plan-concept is the most important intermediary product of planning, a summary, preferably in several variants, of the main objectives and instruments of the economic policy. Conceptual variants may be drawn up particularly in four fields. These are: the rate of growth, external economic relations, proportions of distribution, and economic structure.

On the basis of the selected concept the plan may be drawn up in detail which equally means the checking and selecting of partial concepts as well as the coordination of objectives and instruments.

The part closing the chapter treats the evaluation of the implementation of economy-wide plans. Here the author mentions the requirements of planned socialist economic development. These are the following: heading deliberately towards the building up of a socialist society; proportionate economic development; providing favourable conditions for enhancing production efficiency; guaranteeing such growth rate and such formation of the structure as are suitable for promoting fulfilment of said requirements (p. 171).

The above list of requirements – which could be increased to nearly any length – can be approved of as general requirements of development, however, they cannot be regarded as specific criteria of systematic planning.

Chapter four's title promises an exciting subject: the evolving of the methods of economy-wide planning, and the promise is fulfilled in an ingenious way, searching for connections with scientific development. The author guides the reader through the process of planning from the collection of information up to decision-making, then he discusses four highly important problems of planning methodology. These mathematical methods are new forms of "problem-oriented" planning, of the economic-technical backing-up of information (the so-called partial concepts) and of complex decisions (the central development programs). The way the author qualifies the different methods is in many cases individual, for example the only function attributed to mathematical methods is information processing, however, by this the risk of commonplaces is parried.

In the subsequent part the changes in the categories of planning and mainly those in the system of indicators are presented, then economic processes are reviewed. This latter part contains the following statement: planning cannot but reckon with monetary processes expressed in terms of actual prices, instead of reckoning with value processes. This is justified because value cannot be measured but in terms of money but this needs also prices which, on the other hand, do not express the value. This is an apparently logical but contestable reasoning, it even challenges the basic categories of our control and management system. For example what is then expressed by national income in this country?

Chapter five discusses planning of major economic processes, meaning, by the term major economic process, in a rather peculiar way, the rate of economic development, its main interrelations, main proportions, the main material and monetary processes and economic regulation (control) (pp. 229–230).

In the framework of treating the planning of the said three main economic processes an idea can be formed about the dilemmas of development and about the system of interrelations between various partial decisions.

The lengthy but always absorbing and practical discussion evidences the author's proficiency and his belonging to the "inner circle", in the good sense of the word. I nevertheless have to give voice to my feeling of two wants which will certainly not diminish the considerable merits of this chapter. The first thing I miss is a coverage of the acute characteristics of at least the main sectors (branches) and industries in the detailed review of production and distribution. The second one is that under the title of planning price and incomes control, only requirements, problems and instruments are formulated. The author owes the method of planning, and the way of devising measures and coordinating instruments.

Chapter six describes how the drafting of the economy-wide plan is organized. This part, too, discharges a debt of the literature. It allows also for people attached to the process of planning "from outside" to learn this intricate system and their position in it. Organizations participating in economy-wide planning may be divided into three classes: planning organizations (the National Planning Office, functional and sectoral authorities), organizations and bodies involved in planning (councils, important enterprises) and finally the bodies and organizations asked to comment upon (representative bodies, scientific, social and political institutions and organizations).

The drawing up of the plan needs to be scheduled like a programme, following the logical processes of planning described above. It is learned that the plan concept is elaborated in three stages as follows: formulation of economic-policy ideas, supplying the background information (preparing partial concepts, international coordination) and then the drawing up of the draft concept. This latter stage includes the synthesis of information, the grounding computations, and their coordination.

The detailed drawing up of the (five-year) plan is simplified because it can be based on this concept and is at the same time complicated because it has to penetrate to a much greater depth and requires broader background information. In the course of the detailed and final elaboration of the plan the most advantageous alternatives of development are chosen, the background computations are deepened, and the partial objectives are selected. The most important events are the taking of government decisions, preparation of government actions, devising the means of regulation, coordination of ends an means and, finally, the drafting of plan documents and their preparation for approval.

The seventh conclusive chapter of the book treats the planning activities of business organizations and the relations between the state and these activities.

In Hungary before the reform of 1968, the planning activities of business organizations used to be an element of economy-wide planning which implied interest in an easy implementation of the plan. Now enterprise planning is autonomous but interest in loose plan has not fully ceased. This is due partly to the participation of bigger enterprises in economy-wide planning and partly because the plan, ie., its fulfilment, has remained to be one of the bases on which enterprises are judged.

"The enterprise plan must express the real intentions and aspirations of the enterprise" (p. 375). Regulators and, occasionally, direct state decisions and statutory obligations must provide for the harmony between these and the objectives of the national economic plan.

Thereafter the author treats the time horizon of enterprise plans, the methods and organization of planning, and then the content and approval of plans. The ability of adjustment to changing conditions and planning allowing for flexible business management are stated to be important criteria.

Many useful statements are found in the book also with respect to the treatment of enterprise planning by the economic authorities of the state, for instance in the review of the importance of the central task to guarantee favourable conditions for enterprise planning, to make the objective of planning known, to spread planning experience, to give professional training, and to give intormation in time about central concepts and contemplated measures.

It is naturally necessary to ask for information about enterprise plans. But what should be the attitude of central authorities towards plan fulfilment? The answer is unmistakable: ". . . as long as enterprises are autonomous in deciding on

the content of their plan, they cannot be responsible to the economic authorities of the state for fulfilment" (p. 410).

Of course, this will not relieve the supervisory organizations from their duty of checking and evaluating enterprise management. In the end the reasonable subjects of evaluation by the supervisory authority are collected in a bundle. Then the following is stated as a conclusion: "Obviously the successful implementation of these tasks necessitates steady furthering of the entire system of national economic planning and control, and in this framework of economy-wide planning."

Ákos Balassa has made an important forward step on this way.

A. STARK

BOGNÁR, J.: *A fejlődés és az együttműködés századvégi fordulópontjai* (End-century cornerstones of development and cooperation.) Budapest, 1980. Közgazdasági és Jogi Könyvkiadó. 354 p.

The recent volume of studies written by József Bognár is actually a continuation of his book published in 1976.* In that book the author drew attention to the advent of the new era and to the need of adjustment to consequential new conditions and requirements.

In his new book the author advanced at long stride forward, in several directions at the same time, and subjected to through analysis the processes evolving as a result of the new world economic era and by now powerfully affecting the conduct and action of every participant in world economy by their manifold impacts. The volume of studies, its nature as well as the "genre" deliberately chosen and named by him "economic essay" in the introduction gave a good opportunity to József Bognár to do that. However, after reading the volume of studies the reader has the impression that the said definition is not quite accurate, especially as far as the economic character of the essays is concerned. For most of the studies included in the volume transcend the bounds of the "economic" way of approach – exactly because of the very habitude of the author, his deliberate aspirations and multidisciplinary way of thinking and method of analysis – and bring up scientific evidence and facts to state the need for a simultaneous and complex consideration of political, security (strategic) and economic factors and aspects.

Altogether 13 studies are contained in the new volume of József Bognár, each of them were written between 1976 and 1980. Nearly half of them (6 in total) treat the most essential problems and interrelations of the new world economic era. Another three papers are on the socialist (CMEA) countries and three of them treat problems of cardinal importance concerning the adjustment of the Hungarian economy to the new world economic state of affairs. The last two studies of the volume are intended to draw attention to the broadening social functions of science, and to the increasing responsibility of economics and economists, in a world political and world economic situation where the opportunities of development are already limited and where conditions for solving the more and more acute global problems are for the time being missing.

In *Chapter I* entitled "Transition to the new world economic era and the tasks of social sciences", setting out from the different structures of the international political and economic powers, the author presents, mainly through an analysis of problems and aspirations of developing countries, the barriers to international political and economic decisions and the implied difficulties and hazards. It is a basic conclusion that the strengthening of interdependence requires a new kind of approach and new forms of political action and this in turn requires a new type of relationships between political leadership and science.

In *Chapter II,* the author presents the transformation which the system of goals and instruments of economic growth underwent in the course of transition to the new era. He notes that while the dependence of national economies on external economic relations was increasing, a conflict developed between the set of require-

*Bognár: *Világgazdasági korszakváltás* (Changing era of world economy). Budapest, 1976. Közgazdasági és Jogi Könyvkiadó. 225 p.

ments of economic growth and those of the political and security (strategic) spheres. Hereinafter he deals with the causes of disequilibrium encountered in the European socialist countries, with the ways of tackling it, and with world economic factors affecting the economic growth of developing countries. In the conclusion of this chapter the author discusses the new tasks and requirements set to economic science and correlated with trasition.

Chapter III of the book is a study of the dialectical relationships between political security and economic interests, related to the phenomena of interdependence, and the conclusion is arrived at that in the resulting state of affairs new kinds of management and control methods are required. The preparation of decisions needs an interdisciplinary approach and the requirements will also be comprehensive. A more important role must be given to long-range aspects and considerations. Next to almost artistic creativity, risk-taking and flexibility will be necessary in leadership and the importance of scientific consultations will be greater.

In *Chapter IV* the new conditions of energy and raw material management are analyzed in the world economy and in Hungary. In this context the changing conditions of energy and raw material production and the novel way of the formation of their cost factors are pointed out.

Chapter V of the volume analyzes the interrelations among "Transition, agriculture and world nutrition", mainly from the developing countries' point of view. It is noted that transition finds such agriculture in the third world which is not and will not in the next several decades be capable of coping with the tasks of food supply. This problem, correlated with demographic conditions and the consequential agrarian overpopulation, cannot be resolved simply by the transfer and adaptation of technologies or advanced ways of production. It needs a profound transformation of the entire way of thinking and the scale of values as well as of the way of life and aspirations of agricultural societies of tens and hundreds of millions. However, such solution would need a comprehensive (global) concept and an indicative world plan whereas the latter would require a perfectly different international climate.

Chapter VI analyses the importance and impacts of the new international economic order in the world economy of transition. The author points out that although the concept of the new world economic order is criticized from conservative and progressive sides alike, this concept deeply impresses the political way of thinking and activity of the overwhelming majority of the developing countries and in their internal state of affairs it strengthens the tendencies heading to radical social reforms. However, it is a shortcoming of this concept that it ignores the problems of East–West economic relations and thereby tries to squeeze out the socialist countries from the struggle for attaining a new international economic order acceptable for all the parties.

In *Chapter VII* of the book the interactions between external economy and development are studied in the intensive period of socialist economic development. In the indroduction the external economic model of socialist economy evolved over history is presented, its basic characteristic feature being introversion. In the subsequent analysis it is expounded that in the period of transition to the new era, switching over to the intensive stage of development and the necessary transformation of structure it implies cannot be carried out successfully but by means of a clever and active external economic strategy which should properly be based for a long range.

Chapter VIII carries the title "Connections of the CMEA with world economy in the course of transition" and it analyses, once again in connection with the factors of transition, the interaction between political, security and economic factors that determine the "system of outside links" of the CMEA. It is noted that foreign technology needs to be imported in order to solve succesfully the tasks which the CMEA countries' economy is facing, therefore import substitution is not a suitable means and method of the development policy any longer. In its stead an export–oriented development policy must be pursued, especially in countries like Hungary. The problems of the set of conditions of export orientation are studied in detail.

In *Chapter IX* of the book very interesting and original statements can be read about the

role of economic, political and security factors in East–West trade and their interactions. József Bognár assumes that in the course of external economic policy and action, the economic, political and security factors must be considered in a system of interactions, for today national security itself cannot be regarded as merely a political-strategic factor. At the same time the political and security aspects cannot be disregarded in the analysis of economic factors for that could lead to erroneous conclusions. In this chapter the author treats the implications of the growing instability of international economic and political relations in particular. In its course he derives the conclusion that the current crisis of the international economic relations will be intensive and long-lasting. At the same time he points out the objective limits to the policy of cold war and escalation and on that basis he outlines the possibilities of action by which the critical situation could be relieved.

Chapter X entitled "Development and equilibrium in the Hungarian economy" contains the contribution made by the author at the session of the National Assembly on December 20th 1978. It deals with the role played by external economic factors in the upsetting of equilibrium and outlines the main directions of measures aimed at creating the conditions for restoring equilibrium.

In *Chapter XI* of the volume the author expounds his ideas about the system of requirements of coordinating "The new world economic era and the Hungarian external economic strategy". In his opinion the emerging disadvantageous processes call for either a drastic readjustment or preventive control. The Hungarian national economy has to devise a new external economic strategy but this would be feasible only in the framework of a profound reform of the overall economic policy. The problems relating to the external economy have to be put into the centre of our economic development and this needs a totally different economic approach.

In *Chapter XII* entitled "The limits of development and the social functions of science" such ideas are scrutinized in detail whose elements were presented already in previous chapters. The changes that took place in the role and structure of science, the relations between politics and science, as well as the system and role of scientific consultation are treated.

The last chapter in the book by Bognár József "The responsibility of economic science and economists", is a splendid summary of all the cardinal problems which economic science and economists of countries and societies trying to reduce and overcome the negative implications and global hazards of the transition into the new world economic era are facing. Also the responsible attitude of the author towards these problems is shown. In the introduction to this essay it is emphasized that "more and more clearly and directly responsibility takes the form of responsibility for the destiny of mankind, for survival and for the future" (p. 302). The author displays the growing responsibility of scientists in international life and in this context special note is made of the particular role and responsibility of economists in guiding the social processes. Then the value judgement and behaviour of economists are analyzed in the context of transition. The impacts of the social, political and international environment of the economy are covered in detail, postulates of rational action *vs.* the existing economic conditions as well as the need to harmonize economic and political aspirations are analyzed. The author is of the opinion that a world economic conference to be convened on the "summit" level could greatly contribute to the above. Namely, the solving of the world economic crisis is greatly impeded by the cirumstance that "world economy is a centre of processes that has no power structure" (p. 334). This makes the formation of a world economic discipline still more imperative, for when an autonomous interest or power is present it will automatically safeguard itself.

In my opinion the volume of József Bognár is a significant contribution to the formation of this world economic discipline as its attitude, its way of raising problems and its responsibility shown in the quest for the methods of solution are free from any national narrow-mindedness and provincionalism. Though a Hungarian economist, he feels responsibility for the destiny of mankind and the world; he is deeply convinced that at the time of world economic transition the requirements deriving from the still more fundamental feeling of responsibility for the future of the

Hungarian economy and the Hungarian nation can be complied with only by getting ready for the changes in time and by steadily increasing our rate and efficiency of adjustment because "in this stage any failure and hesitation will take double revenge" (p. 18). For this reason the essays of József Bognár are strongly recommended to all economists and theoretical and practical experts who, on a similar platform, show responsible interest for the problems of the coming years and decades and for their probable impacts.

B. TÁLAS

БОГОМОЛОВ, О. Т.: *Страны социализма в международном разделении труда* (Socialist countries in the international division of labour.) Москва, 1980. Наука. 355 p.

With the present wide range of industrial production, its complexity, especially in the engineering industry, electronics and the chemical industry, and with the pressure towards cutting production costs by way of increasing the scales of production, *even the biggest and most advanced countries find it impossible to manufacture the full range of their commodities efficiently.* Consequently, international specialization is indispensable for efficient production and for assuring product quality. This is the starting point of the author and he keeps reiterating this idea in his book.

Chapter 1 of the book clarifies the notion of and conditions for socialist international division of labour. Then the author reviews the social and political factors of division of labour between the socialist countries which he deems to be more important than environmental, geographical and technical conditions in the formation of the international system of CMEA division of labour.

Chapter 2 treats the principles of socialist international division of labour. The advantages of the division of labour within the CMEA are presented in comparison with disadvantages of the capitalist division of labour, through the analysis of a document entitled "Principles of the socialist international division of labour" adopted in 1962.

In *Chapter 3* the author discusses the evolution of socialist economic integration which he considers to be a new quality. He dates it to the years before the approval of the Comprehensive Programme but attributes it to new forms that became common only in the 1970s (eg. international economic associations, investment contributions). Integration means a new stage also in the relations between the different countries and their governing parties, namely, the most important resolutions in connection with the CMEA are taken at meetings of first secretaries and prime ministers.

The author explains that the energy consumption of small CMEA countries was 580 m tonnes of fuel equivalent in 1975, of which 70 per cent was of internal origin; in 1980 it amounted to 780 m tonnes, 60 per cent from internal resources, and for 1990 he prognosticates 1 billion tonnes of fuel equivalent, of which only 50 per cent will come from internal resources (domestic production plus CMEA imports). There will be objective barriers to any increase of Soviet fuel and iron ore supplies. In his analysis the following instructive statement is made' "the problem of raw material and fuel supplies must not be solved in isolation but by considering the evolution in other fields – especially by studying the input/output proportions of the engineering industry – as well as the opportunities of cooperation with developing countries".

In the section "The mechanism of implementation" of international integration the following is stated: "The main instrument of the integration policy under capitalism is only of complementary importance under the conditions of socialism. Integration inside the CMEA is distingusihed from that in the EEC just by the priority of plan instruments", the author states, reiterating his thesis expounded already at the World Congress of Economists held in 1975 in Budapest.

In *Chapter 4* the joint planning of CMEA countries is discussed. Its role is derived from the fact that the instrument for reallocation of the "actual" (that is, physical) resources in general, and consequently also for the purpose of integration, is the directive national economic plan. The forms of cooperation in the field of planning are

reviewed, then the roles played by various CMEA organizations as well as the relationship between the national and the cooperation mechanism are discussed. Bogomolov claims that the 15-year experience of economic reforms in his view evidenced among others that it is the structural policy in the first place that is supposed to overcome deficiencies by which the positive impacts of the system of economic control are marred. The author appreciates the balanced state of the Hungarian domestic market as one of the positive achievements of economic reforms.

He also points out that the introduction of reforms was hampered by many an inconsistencies; and he considers the way the medium-level organizations of control were formed in the GDR to be the main line of improving the system of management. He mentions the Hungarian practice as a positive example for the greater attention paid to small-scale enterprising and household farming. In summary he underscores: "Despite the tendency of approximating the planning and incentive systems of CMEA countries, the *differences* justified by special features of the various countries will continue to survive along with a constructive search for new solutions. This necessitates measures that should help better alignment with the mechanism of integration."

Chapter 5 treats the formation of mutually complementary sectoral and regional structures. Writing about the concepts of structural policy it is convincingly shown that *the first phase of industrialization needs not necessarily be of the import-substituting type* and the different socialist countries may only be forced by certain definite unfavourable foreign political conditions to carry out industrialization in another way than the most efficient structure that is also helped by the international division of labour.

Chapter 6 deals with the international specialization of production. The author shows that in everyday practive deliveries made under agreements on specialization are considered to be specialized production, although this does not always mean real specialization, because agreements on specialization often include traditional simple export and import transactions. On the other hand, for example, shipbuilding in the GDR and Poland which was traditionally developed mainly to meet Soviet requirements, qualifies as international specialization even without statutory regulation. Also the mechanism of specialization and cooperation is analysed and, on basis of the lessons of the CMEA recommendations of 1956 – which were often proven to be unrealistic – the following and hardly contestable conclusion is derived: on the level of integration it is insufficient to strive to minimize inputs at community level, ie., to consider the regional optimum, but also the interests of the individual countries must be observed.

Chapter 7 deals with the problems of efficiency of the socialist international division of labour. Analysing the mechanism of the generation of economic gain, Bogomolov stresses that Ricardo's theory of comparative advantages also applies for conditions of the socialist international division of labour.

The author challenges the concept that developing countries are forced to unequal exchange in international trade merely because in the trade pursued on basis of comparative advantages, different amounts of national labour are exchanged. In the international exchange the socially necessary amount of labour is not determined by the individual inputs of the different countries (nor are individual manufacturers determinative inside a country).

The author reviews methods of calculating the efficiency of foreign trade. He points out that accounting in terms of working hours entails enormous practical difficulties and, at the same time, calculation in terms of money is not a very reliable base for orientation when price and value terms strongly differ. Such a situation prevails in the socialist countries in spite of the price revisions and price reforms they carried out. Therefore prices do not indicate adequately the efficiency of the socialist international division of labour: in part because the structures of prices are different, and in part because domestic prices show neither capital intensity nor the technical-technological standards of either production or of products. In Bogomolov's opinion investment related to international trade should guarantee *higher* profits than the average domestic rate of returns would in general as it contains a higher factor of risk than home trade. It is very

important that the author draws attention to the fact that the calculation of the costs of import substitution can only be done with enormous uncertainties. This is especially the case when a given product was not manufactured domestically beforehand, because inputs are necessary not only for a given amount of money but also in appropriate time. The stating of the analogous domestic product is extremely ambiguous especially when quality parameters should also be considered in the price, which is really a difficult task.

Chapter 8 analyses the international market of the CMEA countries and its prices. Reviewing the characteristic features of the CMEA market the following is noted: among the multitude of forms of cooperation, the system of *bilateral* trade agreements for medium and short terms is of the greatest importance. The role of multilateral form is increasing. At the same time the multilateral agreements, such as those on specialization and cooperation, can only be carried out eventually on the basis of bilateral agreements. This is another source of contradiction considering that the socialist international division of labour and the socialist economic integration increasingly require multilateral ways of planning, trade and settlements.

Dealing with the interrelationship of international and regional value in the CMEA the author sets out from the fact that the turnover among CMEA countries amounts only to 6 per cent of world trade. The special rules of *price formation do not separate the regional CMEA market from the world market to such an extent that a regional international value* other than that of the world market were generated. It is only the global international value that is modified rather powerfully, the author states. In his opinion, a uniform price cannot develop, if for no other reason, because of the bilateral nature of the agreements. In the meantime, the author underlines that prices formed in the turnover representing 94 per cent of world trade provide the only realistic base on which the CMEA countries may establish the prices of their mutual trade. This is all the more true because these countries trade not only among each other but also with developing countries and with advanced capitalist countries.

In the following parts he gives an interpretation to the two oil price hikes which I find difficult to agree with. He suggests that these were mere corrections of "injustices" caused by manipulation of monopolies keeping prices for raw materials low in the pre-1973 period, so the price explosion has "temporarly restored" the terms of trade for developing countries. The author does not present any statistics on international balances of payments to prove his convictions although it would be clear from such statistics that the most trouble was caused by the oil price explosion just to the LDC-s.

At the same time the author also notes that the adopting of world market prices is not free from problems. Prices of commodities traded at exchanges can be unambiguously determined. However, this is not the case of machinery, especially when sophisticated, nor in trade of spare parts and components. Such items are usually exchanged in most cases at internal accounting prices of the large companies. The international prices of agricultural commodities, too, are distorted by the EEC agricultural policy. The appliaction of the CMEA principle of "half-freight"* (eg. in the case of transportation from Siberia) also causes difficulties. Therefore the author believes that the only suitable reference in the improvement of the price system and especially in the intra-CMEA turnover of spare parts and components manufactured under specialization agreements should be the internal prices of the member countries (p. 165). This is contradictory to what was stated on pages 137 to 140 and seems to be raising day-to-day foreign trade interests to a "theoretical" level.

In *Chapter 9* settlements and credit relations of the socialist countries are scrutinized. Since the transferable rouble is used for the settlement of turnover between the CMEA countries, Bogomolov says that for this very reason (?) it

*According to this principle the CMEA countries do not settle the actual freight among each other, but the half of a hypothetical one that would arise if goods were *bought* on the main capitalist market of the goods in question (Ed. note).

automatically assumes the function of the measure of value. The transferable rouble functions as a means of payments and turnover in planned transactions, while in the turnover not pre-fixed in lists of deliveries such functions are limited. Up to the extent of overdraft and (forced) credit, it also acts as a means of accumulation. The author points out that in order to make the "commercial exchange rate" of the transferable rouble influential upon the interests of foreign trade organizations, a direct connection should be established in each country between export revenue and the amount of national currency it can buy.

Writing about the organization of settlements inside the CMEA, having shown that the bilateral balancing of international trade is an impediment to international trade, the author underscores: it is a *precondition* of the switch-over to multilateral balancing to allow any country with assets in one given relation to spend her surplus on purchasing commodities which she is really in need of from the other countries. Examining the practice of CMEA-countries, Bogomolov points out that although multilateral balancing is feasible in the system of settlements, the planned control of turnover still remained bilateral, the different member countries strive at balancing not only globally but also according to "national economic importance" (that is, "hardness"), and therefore bilateralism remained to be dominating. "Planned multilateralism" is also obstructed by differentiation according to "hardness"; because special provisions must be made to prevent the payment for assets originating from the export of economically important commodities in "soft" items. On the other hand a kind of multilateral turnover covering only "soft" items could be imagined.

Writing about credit relations the author reviews and appreciates the activities of CMEA banks but at the same time he also warns that the International Investments Bank should enhance the liquidity of its credits in transferable rouble, since those can be made available at present only when specified by the countries concerned in bilateral trade agreements whereby the practical possibilities for utilizing the credit funds of the bank is limited.

Chapter 10 discusses the principles and organizational forms of foreign trade of the CMEA countries. Soaring external prices increased the role of "financial bridges" separating the foreign and the domestic markets in each CMEA country. This way the influence of the external market upon the internal one was generally weakened.

Chapter 11, dealing with foreign trade statistics, notes that along with a part of commodities, also services and transportation performances are missing from the CMEA countries' practice of observation.

In *Chapter 12* the general characteristics of external economic relations of socialist countries are reviewed. It is also pointed out that although over the long term the rate of growth of foreign trade between CMEA countries is higher than of world trade as a whole, still in the period 1971 to 1978 it lagged behind the growth of the later. It is stated that the share of advanced capitalist countries in the foreign trade of the CMEA countries, which was in the range of 20 per cent by the 1960s, was artificially low. Analysing the commodity pattern of the turnover Bogomolov points out that in 1979, the small CMEA countries covered 90 per cent of their requirements of coal, brown coal and coke, 68 per cent of oil and appr. 70 per cent of iron ore and fertilizers from deliveries coming from the integration.* He acknowledges the progressive changes in the overall foreign trade commodity pattern (that is, without a break-down by main trading areas) over the long run, not failing to note at the same time that two-thirds of industrial commodity exports are directed to the regional market.

In *Chapter 13* relations between the socialist and the developing countries are studied. It is stated that the demand for a new international economic order was supported by the socialist countries at the 4th session of UNCTAD as an attempt aiming at the democratization of the capitalist order of world economic relations. Dealing with the demands for NIEO the author

*Meaning probably domestic production plus imports from the CMEA (L. Cs.).

generally does not touch on disagreements between "East" and "South". He elaborates some of his reservations concerning the extremist demands of developing nations, noting that the first contribution towards the NIEO should be concentrated on domestic efforts of the developing countries concerned.

In *Chapter 14* the author discusses East–West relations. His starting point is the fact that the "merciless necessities" of economic life "*imply* an increasing intensity of participation in the world-wide division of labour". The system of East–West relations is not based on transitory, short-term interest but on long-range and stable ones, dictated by economic and political factors. At the same time, especially in branches applying advanced technology, cooperation with the West cannot be a substitute for development based on self-reliance, warns Bogomolov, underscoring in the meantime that the socialist countries are opposed to the various concepts of autarky.

In his review of the commodity pattern and dynamics of turnover, the author points to the unbalanced state of East–West trade: between 1971 and 1978, the cumulated liabilities of trade balances amounted to 40 billion roubles (52 billion dollars). He also shows the asymmetry of relations. "It is clear that any violation of these relations, for whatever reason may it occur, would be felt more intensively by the CMEA countries. It is absolutely necessary to bear in mind the unequal dependence of parties." (p. 290) The author studies problems of export structure of the CMEA countries and the resulting constraints, among others the one that in 1977 the combined share of raw materials, fuels as well as agricultural items amounted to 60 per cent in the exports of socialist countries, while the increase in the share of machines and equipment between 1970 and 1977 equalled to a mere 0.5 per cent (from 9.1 per cent to 9.5 per cent).

Chapter 15, the most successful part of the book, is an analysis of the foreign economic relations of the Soviet Union. Bogomolov points out that external economic relations *serve the central national economic development objectives of the USSR,* such as earning the additional capital required for the development of Siberia and the Far East. The importance of foreign commerce is growing also in the field of the supply of the population with foodstuffs and industrial consumer goods. Analysing the commodity pattern of imports he shows that this played an essential role in the development of the Soviet chemical industry, transportation, the automobile industry and metallurgy: for instance 70 to 80 per cent of equipment in the KAMAZ factory and the whole of the Togliatti automobile works was of imported origin. 15 per cent of new equipment installed in the Soviet Union between 1976 and 1980 came from import which is already an appreciable volume and it even reaches as much as 15 to 50 per cent of inputs in certain important commodities. Noteworthy is the 20 per cent share of the commodity group of various fuels, raw materials, material semi- and by-products in Soviet import. The latter item consists mainly of the imports of special castings and pipes used mainly by the crude oil and natural gas industry and bought in return for the export of standard castings. More than a third of total Soviet imports consists of food, agricultural and industrial consumer goods (this latter item amounts to 11.5 per cent of the turnover of the domestic market).

Writing about the structure of export he stresses that the share of machines and equipment in Soviet exports is below the corresponding values of the USA and the FRG and according to the table on page 313, this share even decreased from 21.5 per cent in 1970 to 18.7 per cent in 1975, and to 17.5 per cent in 1979. On the other hand the export share of fuels and electric energy showed a dynamic increase: from 15.6 per cent in 1970 to 31.4 per cent in 1975 and to 42.2 per cent in 1979. These, together with the other raw materials, represents 55 to 60 per cent of Soviet export in the past years. Owing to the objective limits to increasing the export of these items, *it is necessary to increase the share of manufactured goods in the Soviet export as well.* Although the relative world market prices naturally need to be considered, the basic means of increasing Soviet export may be the evolving of new export capacities in the manufacturing industry. Because of the small share of export in many branches of production (eg. only 3 per cent in engineering), it would be expedient to create *specialized enterprises*

manufacturing exclusively for export where production culture and quality standards could be of a higher degree. Such export zones could rationally be located to the Western part of the Soviet Union up to 1200 or 1500 kms from the border.

In *Chapter 16* Bogomolov reviews the position of the two types of integration in the world economy. Contradictions in the integration processes, the author correctly notes, follow not from the global but from the regional bases of their development (p. 327). By constrasting the planning and market instruments of integration the substance of the problem is circumvented. He states: In socialism, the development of commodity and monetary relations is *presumed* by planning in both national and international respects. Bogomolov emphasizes that the *CMEA did not set the objective of isolation from the rest of the world but it aimed at enhancing the world economic weight of this community and at a greater competitiveness of commodities manufactured by member countries in the world market, ie., at further increasing participation of member countries in the global system of commercial-economic relations* (p. 331). Thereafter the inconsistencies of West European integration and the achievements of the CMEA are presented in detail. Comparing the performance of these two integrations Bogomolov points out that the much higher degree of self-sufficiency in fuels and raw materials used to be an important advantage of the CMEA over the EEC in the period under study. Both communities contributed to the promotion of internal turnover. As against the EEC, in the CMEA the approximation of development levels has actually progressed and cooperation inside the CMEA contributed to the high rates of economic growth in member countries. However, problems of energy supply, shortage of labour, world economic adjustment, and the need for transition into the intensive phase of development of the economy have been raised in the CMEA as well. Accelerated technological development necessitates radical changes in the system of management.

This is a book of high professional standards and high topicality. It reflects the way of thinking and motivations of those Soviet economists and politicians who consider the continuation of dédente in both political and economic spheres to be of great importance. In this context and to that end they accept a certain extroversion of the CMEA integration, and argue even for changes in the whole system of economic management and control. Although long entries contain statements already known from Soviet daily press and Soviet official statements, the book may nevertheless be regarded as an important new contribution to the specialized literature on the international economic relations of CMEA countries. This is the case first of all because it represent a sober and rational evaluation of a number of issues, and this is an important precondition of succesful cooperation among socialist states. The above holds mainly with respect to national sovereignty, CMEA optimum, and the concept of "own price basis", autarky at the level of CMEA and efficiency of cooperation.

A bit of a structural weakness is caused by the fact that the book is not a monography treating one definite subject but it is quite clearly a collection of different works of the author. This in itself does not matter because the book is interesting also as a compendium of papers, but it is somewhat dishomogenized by making the impression that papers made for audiences of various qualification and range of interest were put together at random. At the same time it is to the benefit of the given way of treatment that the points of view and way of thinking as well as internationally respected knowledge of a leading Soviet scientist is learned in a very broad spectrum on world economic problems.

L. CSABA

EHRLICH, É.: *Japán – a felzárkózás anatómiája* (Japan – The anatomy of closing-up.) Budapest, 1979. Közgazdasági és Jogi Könyvkiadó. 312 p.

In the person of Ms. Ehrlich such an author has added her treatise to the many volumes published in the seventies on Japan's development and unprecedented growth whose earlier research work and publications are associated by

the Hungarian reader mainly with comparative economics. After such scientific antecedents the reader of this book duly expects not merely the study of a country but a paper penetrated with experiences and morals of international comparative analyses. He will not be disappointed. "The anatomy of closing-up" is a work testifying to enormous experience and the capacity to give a comprehensive view. Moreover, as far as I know, this is the first occasion in the Hungarian literature to analyse the Japanese economy over such a long historical period: beside the summary of about 250 years of antecedents, the book treats round 100 years of industrialization starting from 1868.

In her presentation of the precedents of industrialization, Éva Ehrlich follows the practice of the active teaching professor, who can see and who can make it seen. She gives a very interesting review of the prehistory of the subject to be treated and already here she points to the important buds from which the later fast development could evolve. An attentive reader will find the factors that accompanied Japan's development one by one: the proportion of arable land was relatively small; a strong central power was established; the community of big families (of the patriarchal model) provided the framework for organizing production; the agricultural population was engaged as secondary occupation in the manufacturing of industrial articles; poorer peasants sent their children to serve wealthier families where they were employed for a lifetime; the "policy" of seclusion permitted the containment of strategic expenditure; eminent importance was attributed to public education already in the 17th and 18th centuries, and self-control, parsimony, and the priority of superiors and of serving public interests were emphatically taught.

The detailed process analysis of the century of industrialization (1870–1970), which is the backbone of the study, is in a most expedient way combined with static "snapshots" and so one is in the position to appreciate the way completed on the basis of comparing the end points. It is a merit of the author to present the state and problems of the Japanese economy and society "on a single photo" (in the Epilogue) by blending several planes into each other. a sort of allusion to the development which photographic technology has undergone in the meantime.

Neither the portraying of the process of industrialization is done merely by the method of historical analysis but it is based upon "focal points" such as manpower and productivity, capital formation and the use of capital, changes in production and its structure, as well as foreign trade. In these four chapters the interactions of growth and factors of production, ie., "some such facets of the total economic process which are parts of growth themselves, but which may be regarded in addition as motives and results of growth as a whole", are discussed.

Although a periodicization of the century of industrialization goes through the book, the reader gains much from the procedure that Éva Ehrlich does not spend much time on the variety of possibilities and points of view concerning the stating of limits for phases and eras nor on relating her personal point of view. Instead she presents what she has to say in a most systematic way and with a precision that does not burden the reader. As a rule she manages the hard-to-process enormous background material by interpreting from it only the amount sufficient for the illustration of her train of thoughts. (We say "as a rule" for it is felt that occasionally fewer tables and data would have been "more".)

In my opinion, analytical description is the greatest asset of Éva Ehrlich. The most pleasant parts of the book are undoubtedly the entries, pages and chapters of the summarizing type where she no longer illustrates but makes statements in the light of data; for example in Chapter 1 on education, professional adult education (pp. 69–71), the so-called "multiple-occupation" (p. 81), the role of small workshops, their cooperation with big enterprises (pp. 91–97), the mentality of labour (pp. 121–127), and rice production (pp. 166–170). I feel that the presentation of the expansion of industry (176–183) as well as the features of infrastructure (pp. 189–196) are the peaks of the whole treatise.

It is another merit of the author that state interference playing a prominent role in the case of Japan is not covered in a special chapter but is reverted to in every chapter, hinting at its importance embracing the whole of the

economy. Further values of the book are the diagrams placed in different parts and drawn mainly by herself which illustrate the statements (eg. the chain of producing the major products of the manufacturing industry; the life path of products; the schemes of the degree of processing and of the rising technical standards; the hosts of symptoms of economic dualism and the pattern of alterations in its manifestation in the century of Japanese industrialization – pp. 178, 181 and 244). *Table 35* summarizing the factors of increasing productivity should be listed here.

With an excellent sense for dramatic composition Éva Ehrlich asks and answers the question that matures in the reader by the end of the book: Why just Japan? The basic motive of Japanese growth she finds to be in the bipolar nature of industrialization, in the links between the traditional and the up-to-date, as "this is the clue of preserving the inherited factors of production and their extensive (next to full-range) mobilization and utilization. Thereby, obviously with appreciable multiplier effect, the Japanese economy rendered almost the total national working time base mobilizable... Furthermore, dwellings and equipment belonging to them were turned into working means of production, traditional means of production that could be operated only in family homes as well as machines and equipment hopelessly worn out from modern industry were utilized by the industrial (and service) activity pursued within the traditional sector. The resulting capital saving impact, or this high degree of utilization of real assets, must have played an important role in that the industrialization of Japan was carried out without any appreciable import of capital" (pp. 250–251, italics omitted).

The book of beautiful appearance is closed with detailed references to literature and statistical sources, tables, legend of figures and diagrams, as well as with summaries in Russian, English and German. (The book will soon be published in English by Akadémiai Kiadó.)

A. HERNÁDI

HERNÁDI, A.: *A japán gazdaság a hetvenes években – szakaszváltás és külgazdasági kapcsolatok* (The Japanese economy in the 1970s – a new stage and external economic relations). Budapest, 1980. Kossuth Könyvkiadó. 173 p.

Japan increased her world economic weight and international radius with powerful vigour even under the aggravated conditions of the given period. A thorough analysis and detailed evaluation of her economic strategy and its updated armory of instruments are therefore topical and instructive also from other countries' point of view.

The monography convincingly shows through the example of this Far Eastern country the importance of wisely and flexibly remodeling and modifying the economic structure and of duly considering growing international interdependence both in the accelerating and in the decelerating phases of growth. In the first four chapters of the book the author presents the local key factors of structural transformation and of the evolution of the new stage of development. The next three chapters scrutinize conceptual characteristics, special features and problems of external economic relations and the rest discuss the regional aspects thereof.

The demand and supply features typical of the Japanese labour market as well as the characteristics of the wage system and wage level are elaborated in a concise and at the same time manysided manner. The economic impacts of substantial wage differentials existing between the main sectors, ie., between small, medium and big enterprises as well as the specialities of the system of employment are intensively studied. In the early seventies Japan lined up to leading capitalist countries also with respect to wage level which is certainly an impediment to the quick expansion of export but her export successes are nevertheless extraordinary. The clue is dynamic product development in the first place, an industrial strategy oriented towards the domination of products that require a high degree of knowledge, parallelly showing the

characteristics of economizing on raw material and fuels and saving living labour. Special attention was paid to the government of this Far Eastern state and to big enterpreneurs closely cooperating with the government, furthermore, to the postwar import of advanced know-how and technology. Relying upon the outstanding adaptivity and discipline of qualified labour, the latter were improved by talented local research workers and by the eminently inventive engineering staff. Independent technical-scientific results have also been spreading quickly and widely in Japan and thus by the seventies she gained a growing international reputation as a know-how and licence exporter. By reducing technological backwardness relative to the USA at exceptionally dynamic pace also the "technological gap" was powerfully narrowed.

One of the main proofs of the preparation for entering into a new stage and a crucial guarantee of its success is the fact that Japan realized in time and has consistently borne in mind throughout her development strategy that technical-technological progress is a power of its own in our times. This statement of the author must be fully agreed with; it will be sufficient today to support it, among others, by recalling that against the export of know-how, Japan is able to expand her imports even of the most wanted commodities.

In the course of analyses the author gives due treatment to the importance, fields and differentiated methods of state interference aimed at steadily updating the economic structure and promoting the flexibility of the foreign trade policy. A deep summary is given of the economic achievements and shaded strategic backgrounds of the concerted activities of government administration and big enterprises.

The chapters analysing external economic activity portray the characteristics and main trends of entering into a new stage, especially in foreign trade and direct capital turnover relations, on the basis of a large amount of carefully treated official data. The part scrutinizing the alterations in the relative specialization of industrial commodity export and its background factors is very interesting. Japan maintains relations with an exceptionally high number of raw material and fuel exporting countries, whereby she tries to decrease her dependence on import. Regional diversification of the sources of purchases is one of the main elements of the economic-diplomatic efforts implemented by Tokyo via developing foreign relations through many channels and by imaginative initiatives. (For example, among others, the markets of socialist neighbour powers play important and increasing roles.) By using a variety of purposeful methods the island country successfully averts the hazards and other harmful implications of being exposed to an overconcentrated circle of partners.

The aforesaid are manysidedly supported by a presentation of the development of trade turnover and direct capital turnover contacts with the different main partners. In the sign of faithfulness to history and objectivity, András Hernádi describes the special factors that form the partnership of Washington and Tokyo, the major stages and accompanying symptoms; the United States is namely the main ally and commercial parnter No. 1. of the island state.

In the new stage it is apparent in Japan's capital exports that direct investments by private enterpreneurs have appreciably increased also in advanced industrial countries. Far-Eastern companies increased their direct investment the most robustly in America; in part in the extracting industries and in part in services. Far-Eastern investors have been welcome in the hope of bringing some relief to unemployment. In Western Europe the opportunity to learn and apply the up-to-date Japanese technical knowledge and technology is also deemed to be useful. The range of Japan's direct capital interests is rather narrow in this region, at least for the time being. While appreciating the review of the new features of capital export, it would have been desirable and useful to give a detailed exposition and differentiated evaluation also of the domestic and international economic factors that justified their occurence and that are only referred to fragmentarily. On the other hand it is proven with proper thoroughness that Japan steadily and most vividly increases her capital export to developing countries, assuring more and more important positions for herself in the third world.

The analysis and evaluation of Japan's role and economic relations in the Pacific area are rich in ideas and new in content. In this context the

author treats Tokyo's extremely important economic contacts maintained with Australia, New-Zealand, Indonesia, the Philippines, Singapore, Malaysia, Thailand, Honkong, Taiwan and South Korea. This area obtains enhanced importance partly because it has become one of the most speedily developing regions of world economy by the 1970s, and partly because it is the site of perhaps the most direct meeting and confrontation of spheres of interests of major powers. Earlier Japan used to develop relations with this zone asymmetrically and so most of these partners have become economically dependent on her. In the seventies, under the influence of a number of factors, a new trend began in this respect and predictably it will be likely to enhance the interregional division of labour.

An apt and concise description is given by the author of Japan's economic relations built out with the socialist countries, pointing out that in the past decade Tokyo's interest considerably increased for this area.

The book truly presents the points where the differences of bilateral and multilateral interests between Japan and her advanced partners conflict. At the same time it gives a dialectic review also of the international political and world economic circumstances that encourage cooperation with them. In spite of the fact that impacts of the said circumstances cannot be underestimated, their economic competition is strengthening in the international markets. The sharpening of rivalry is made a lasting trend also in the new stage because Japan's international economic and political aspirations towards increasing her role have become more overt and active in the period after the second war than ever.

The closing chapter of the monography contains a comprehensive review of the specific conditions of entering into the new stage and a summary of its results, with concise references also to problems encountered. Relying on the analysis of facts and the new features of economic development in the 1970s the author also prepared a forecast, bearing in mind the perpetuation of structural transformations as well as the predictable trends of demand and supply. Japan's economic growth is estimated to amount to an annual average of 5.5 to 6.5 per cent in the period till 1985. At the same time the island country is expected to keep increasing her relative weight in international trade as well as in the export of capital and technology, although at a more moderate rate than before. It is therefore a reasonable expectation concerning Japan's future role that in the 1980s her impact upon the power field of world economy will be felt more extensively.

K. BIRÓ

SZENTES, T.: *Polgári és újbaloldali elméletek a tőkés világgazdaságról* (Bourgeois and neo-leftist theories on capitalist world economy). Budapest, 1980. Kossuth Könyvkiadó. 449 p.

In a previous work* by Tamás Szentes, theories of bourgeois economics discussing the world economy were criticized. The reason for choosing the subject of this book was stated in the introduction to be the emergence of a special intellectual circle confronting traditional bourgeois theories where 'bourgeois reformism' is dealt together with concepts of social-democratic reformers of the world economy and even with petty-bourgeois radicalism and certain "neo-marxist" approaches. Therefore, the so-called "school of dependence" analysing conditions of economic dependence and structural unequality necessarily produces some diverging and contradicting ideas and it is an undoubtedly important and interesting theoretical task to match them against each other.

The name of R. *Prebitsch* is the first one the author mentiones from among the contemporary critics of the dominating bourgeois theories. Prebitsch, firstly through revealing the dark sides of Latin American industrialization, pointed out that the bourgeois theory proclaiming the possibility of a harmonic world economy was illusory. In the world economy a "centre" and a "periphery" evolved and through the foreign

**Az elmaradottság és fejlettség dialektikája a tőkés világgazdaságban* (Dialectics of backwardness and development in the capitalist world economy). Budapest, 1976. Kossuth Könyvkiadó. 495 p.

trade relations between these two parts most of the results of increased productivity achieved by the export sectors of the developing world flew into the importing advanced countries (into the "centre").

The unequalities of trade between developing and advanced countries are underlined by W. A. *Lewis* in a similar way, also keeping within the bounds of the bourgeois way of thinking. He ascribes this to the almost unlimited labour supply in the traditional sector of developing countries whereby wages are pressed down also in the export sector. Therefore, growing productivity does not entail higher wages for the concerned workers; it only means that profit increases and the majority of the profit leaves the developing country through foreign holdings. From the analysts of the situation of the "periphery" the works of Thomas *Balogh*, F. *Perroux*, and G. *Myrdal* are discussed, among others.

Unequal exchange between the "centre" and "periphery" of the world economy is in the focus of debates by different "neomarxists" and neoleftist theorists, which is the subject of the second and longer part of the book. Szentes assumes the discussion is justified because, although the fact of unequality of international exchange is known to progressive economists, up till now political economy has not been able to draw up a generally accepted theory in this respect. In this polemy Arghiri *Emmanuel*, who operates with Marxist notions but who is in many respects an opponent of Marxist political economy, presented a genuine theory impressing also Marxist circles.

In his analysis of the inequalities of international exchange Emmanuel sets out from the ssumption that the flow of capitals is relatively free in the world economy, whereas the mobility of labour is restricted. Consequently, profit rates may be expected to show a levelling tendency but wage differentials may persist. Since the level of wages is high in the advanced capitalist countries – and this is so partly irrespectively of productivity because of trade union power positions – the levelling of profit rates at the same time implies a flow of income from the "peripheries" to countries where wages are higher. He supposes that the rate of surplus value (m/v), ie., that of exploitation, is higher in the peripherical countries than in the advanced economies. (Others, for example Ch. *Bettelheim* whom the book also discusses, start out from the contrary, ie., that the rate of surplus value is higher in the advanced countries and consequently their working class is more intensively exploited.) So, according to Emmanuel, the frontline between loosers and winners is not between the workers of the developing countries and (local or foreign) capital but it is drawn between the workers of the periphery and the labour class of countries where wages are higher. His proposition is simple: in the developing countries the volume of foreign trade evoking exploitation must be limited on the one hand, and wages must be increased in the export sector on the other hand.

Tamás Szentes points out that the apparently progressive demand of higher wages might raise dangerous illusions and that the decreasing of foreign trade turnover (*via* import substitution) is not necessarily likely to bring about the hoped-for advantages either.

An international debate has developed about the problems of unequal exchange. One of the chapters of the book reviews the ideas of the participants, namely, Ch. *Bettelheim*, O. *Braun*, S. *Amin*, and J. O. *Andersson*. Braun, for example, states that Emmanuel's theory cannot explain why capital does not flow *en masse* to the depending countries, why lower wages are not utilized. Andersson proves with concrete examples that the high wage level is not the cause but at most the result of economic development.

The said problems (and the other ones not mentioned here: the tendency of changes in the terms of trade; the social causes of backwardness; assessment of the role of the transfer of capital and technology; etc.), occupy researchers all over the world with good reason. The polemy of Tamás Szentes with the most different statements and especially with the recommendations and conclusions is based on theorems of Marxist political economy. His arguments are convincing and diversified. However, it would have been to the benefit of the book if references were made to the reality and actual contents of the theoretical assumptions discussed, for example in the case of exploitation in developing countries where its degree is considered to be high by one

author and low by another one for the sake of his own particular concept. Theoretical discussion without an attempt at verification gives the impression of vain theorizing.

All in all, Tamás Szentes sets the measure high in his book and presents the reader with a book written with a high degree of accomplishment and theoretical knowledge. The review of theories presented and commented upon in the book by relying on the processing of a vast amount of literature can count on an ever increasing number of interested readers. It must be noted, however, that the reading of the book is often made difficult by its ponderous style and by many unessential references. (To some sentences three footnotes belong from among the total of seven and a half hundred notes of the book.) Although the great problems of world economy are complicated enough.

P. Á. BOD

BAUMOL, W. J. (ed.): *Public and private enterprise in a mixed economy.* London and Basingstoke, 1980. The Macmillan Press, Ltd., 308 pp.

"I have been pleased and even surprised by the amount I have learned from this conference, and hope that this is also true of others. I have come away with a number of new ideas, and it has led me to change some of my previous views." (p. 300) These words introduce the summary written by William J. Baumol, a chief organizer of the conference the proceedings of which served the material for this book and the editor of the volume. Other participants in the conference must have had the same feelings and the readers of the volume will also be definitely impressed.

The conference was held by the International Economic Association in Mexico City in January 1978. Many famous economists contributed to its success. Special note should be made of Lord Káldor who, as stated by Baumol and evidenced by the volume as well, played an extraordinary role not only as member of the preparatory committee and the author of the exposée analysing and classifying the subject of the conference but also as a brilliant participant of debates.

I should like to state beforehand that the volume is attractive because, in the most general term, it reflects life, the diversification and inconsistency of life, its exciting and lively symptoms and trends, mainly through case studies and brief monographies. At the same time the papers present many important and new points of view deserving further reflection for putting the "sloppy" fields of life in order.

It will be enough to state for the sake of illustrating the manysidedness of the conference and the variety of new knowledge and approaches that 16 lectures gave information about 10 countries' experiences. We must be pleased because Hungary was among them: as participants in the conference, Rezső Nyers and Márton Tardos made a really successful joint lecture entitled "Enterprises in Hungary before and after the economic reform."* (Let us also note that in the person of János Kornai there was a Hungarian member of the 9-man programme commission consisting of notable experts representing all parts of the world.)

As far as the subject of the conference is concerned, it is undoubtedly a crucial problem of our time and in the decades behind us – was it more than a century? – it triggered raging political clashes, ideological breaks and rifts. What is better for society: state ownership or private economy? Is the government supposed to nationalize or should it leave the private enterprises alone? Which is more efficient: the state-owned or the privately owned firm. It was a reasonable fear that the ideas expressed by economists are so deeply penetrated with ideological and political creed as to turn the conference into a battlefield of word-wrestling and of vain, annoying bad debates. There were good reasons for Baumol to express his pleasure that this did not happen.

The question of private *vs.* state ownership was given undoubtedly clear answers expressed in deeds by the two worlds, namely, the capitalist and the socialist countries: the revolutionary governments of socialist countries by nationalizing the overwhelming majority of the means of production and by almost entirely abolishing their private ownership; and the

*Published in Acta Oeconomica, Vol. 20, Nos 1–2 (1978).

governments of capitalist countries by not carrying out this decisive act and thus basically maintaining their platform of safeguarding private ownerhip. However, the case is not as simple as that. The review of the proceedings of the conference suggests a general idea that within this difference to be regarded as fundamental, the weight and determining force of many important, new and not quite new, tendencies are growing.

Firstly: for various reasons and in various proportions, governmental sectors of production or services have developed all over the capitalist countries. (By the way, this occasionally resulted in most remarkable opportunities for making direct comparison between the performances of state and private enterprises pursuing similar activities.)

Secondly: the capitalist private sector itself has gone through major transformations, mainly by the separation of ownership and management. For this reason the capitalist enterprises' conduct and the factors determining the efficiency of their activities are greatly different from what used to be portrayed by economists in theory and in works of ideological motivation.

Thirdly: a considerable amount of experience has been accumulated concerning the activities of state enterprises in socialist countries. These indicate that the minute controlling of production from a planning centre is not possible, moreover, it is not feasible by any hierarchical organization, and insisting on such forms may be the source of vast social and material losses. Separating the spheres of activity of the owner government and the state enterprise, and the regulation of their relations has became the first key problem of economic development in the socialist countries.

Fourthly: in the socialist countries and the capitalist countries alike, such forms of ownership and such enterprising organizations have developed which cannot be considered either to be "purely" private enterprise nor state enterprise. These variations show an extremely broad range from the production organizations of socialist countries through Italian and Spanish holdings up to such extremities as the Israeli Kibbutzes (to take our examples from the material of the conference).

Fifthly and lastly, another point needs to be noted which was made sharply clear in the conference, certainly also because of its site: it is not enough for the huge community of developing countries with increasing influence upon the future of the world to know the answer or even simply arguments about the alternative of private capitalist enterprises or state-owned ones. For them, it is a similarly important point whether to allow or forbid the inflow of foreign working capital or the attitude towards national small enterprises which are hardly capable as yet of development and of successfully entering into new areas.

It is found reasonable to class the rich material of the volume, of course not too rigidly, around said points. This will be attempted in the following.

As pointed out also in the said exposée by Lord *Kaldor,* the dimensions and ranges of the state sector are rather different in the capitalist countries. Beyond jurisdiction, keeping public order, defence and administration, which are obvious state functions, in most countries it covers a good part of education, health and transportation. The case is more diversified in respect of systems of the infrastructure as power and gas supply, water supply, garbage removal etc. However, discussions are focused on the industrial enterprises of the state which directly or indirectly compete with private enterprises. The share of this sector is changing and strange. Lord Kaldor mentions Sweden as an extreme and very interesting example where social-democratic governments have ruled for 44 years without interruption but where no nationalization or setting up of a state enterprise took place in the competitive sphere. He quoted Italy as an example for the other extreme and where neither a socialist nor a social democratic government has ever existed (they only participted in the coalition) yet the state-owned industrial sector is large. Between the two extremities is for example Austria – a country considered by Kaldor the most successful one – where the state sector covers mining, metallurgy and the heavy industry in general and where it is rather complementary to than competitive with private industry. France and Britain are also in the middle, where nationalizations were carried out

mainly in the postwar period, in France among others by the confiscation of fortunes of collaborationists and in the latter case mainly by rehabilitating bankrupt enterprises.

Otherwise, the state sector of France was dealt with in two lectures. The first one was given by Pierre *Dreyfus,* Chairman-General Manager of Regie Renault company from 1955 to 1975. His paper was entitled "The efficiency of public enterprise: lessons of the French experience". In the introduction he asked the question which was the central and recurring key problem of debates: what could be considered a measure for the comparison of efficiencies of the state and private sectors? It must namely not be regarded to be separate from efficiency that the French firms in many cases undertook special pioneering functions upon governmental initative at times when private enterprises refrained from efforts and financial risks of investing into new innovative branches. For example the Renault company diversified its profile into the commodity categories of commercial vehicles and machine-tools in this way. (However, as Dreyfus reports, it also happened that managers refused to comply with the government's requirements when they found that their efforts would be in vain and unsuccessful.) He describes relations between Renault and the state as follows: after the chairman has been assigned, the government gives the enterprise management perfect freedom of action. On the other hand the successful functioning of the Renault is indicated by the fact that it never needed to ask financial help from the government. P. Dreyfus reverted to the starting question in the debate as follows: is Peugeot more efficient than Renault because it attains a higher rate of profit. His reply is worth of being literally quoted from the summary text of the debate:

"That was easy for Peugeot, since it did not take any risks. By investing less, one would get higher profit rates. Renault had created 100.000 new jobs in rural areas, while Peugeot did not. Renault also paid higher wages and served the national interest in many other ways. The role of public enterprise was to serve the public interest while remaining balanced financially. One thing that Peugeot had learned from Renault was that planning was useful." (p. 212)

The other paper on France dealt expressly with planning, the analysis of M. *Boiteux,* general manager of Electricité de France, about the successful activities of his institution. He presented the advanced planning apparatus which is successfully used by EDF.

The paper in which Hans K. *Schneider* and Walter *Schulz* review the electricity and gas industries in the Federal Republic of Germany presents a good opportunity for comparison because this electric system, unlike the French one, is strongly decentralized and planning is not typical of it. Its owners are partly local authorities, partly private companies and individuals, and partly mixed companies. The possibility of state interference is provided by law but it seldom takes place. Prices are also formed freely. Experiences show that the system works well. The enterprises strive essentially not after maximum profit but rather after maximum output (that is, as many consumers as possible) for they consider it more important to fully realize economics of scale.

The paper of Richard *Pryke* gives a much less favourable idea about the functioning of the British state sector. He analysed the efficiency of a group of state enterprises (airlines, gas works, railways, electric company, the British Steel Corporation, etc.) creating 13.5 per cent of the GNP. In a temporal comparison results (productivity, profitability, etc.) usually show deterioration in performance. Pryke attributes the reasons to inefficient enterprise management, destructive conduct of workers and their trade unions and *ad hoc* administrative interferences. However, his paper cannot have much influence on the judgement of state enterprise *vs.* private enterprise for he himself states that in Britain, the private sector is similarly "woefully" inefficient. (By the way, the reviewer feels like in numerous other cases, that national performances are somewhat overstated by French authors and understated by the British.)

In the discussions held about the successfullness of state enterprises many participants expressed the opinion that the quality and motivation of management are among the most important factors of efficiency. They also stated the general experience that managements of state enterprises tend to get bureaucratized, to observe

"official" considerations, and to lean on the state budget in case of failure. Others argued that on the other hand also the managements of big enterprises are bureaucratic and managers who are independent from property care more for their own career and influence than for the efficiency of the enterprise. W. Baumol gave a synthesis of these two ideas in his summary realizing that red tape and all its implications are the troubles of the *big enterprise* be it state or privately owned. (As is known, the state enterprises of capitalist countries are big enterprises almost without exception.) Inefficient giants can be equally found in both forms of ownership. The fading or disappearance of the profit motive will, namely, become a problem in both forms. Nor is the dangerous practice of salvageing failing and not profitable big enterprises, for social and political reasons, by state measures as a last resort, limited to one form of ownership or the other.

Thus the relations between the state and the state enterprise became one of the focal points of the conference. This was one of the reasons of the great interest in the paper written jointly by Rezső Nyers and Márton Tardos, the only participants in the conference coming from a socialist country, in which the antecedents and experiences of the Hungarian economic reform of 1968 were scrutinized by concentrating on the changes in enterprise management. It was shown by their study that the organization of relations between the state and the state-owned enterprise is an acute problem also for Hungarian economists. This is why the two lectures in the conference reporting on the successful functioning of a special form of organization of relations between the state and indutrial enterprises in two medium-developed European countries was, at least by the reviewer, found to be extremely interesting and the most inspiring. The scheme in question is the system of state holding company whose biggest institutions have been working for almost fourty years in Spain (INI, Instituto Nacional de Industria) and in Italy (IRI, Instituto per la Riconstruzione Industriale). The report on INI's activities was made by Tomás *Galán,* planning director of the holding company, and on IRI's development by Ajmone *Marsan,* also a member of the staff of the holding company.

The analysis of Tomás Galán about the functioning of the system of the state holding company would deserve more time but this is not possible in a review. Just for the sake of drawing attention to the point: The INI is an autonomous agency of the Spanish government, working under the supervision of the Ministry of Industry and Energy Affairs. It is in charge, in the capacity of a holding company and in accordance with national objectives, of purchasing, issuing and selling bonds. From the point of view of its organization it is a cross-bred: in part a state undertaking (as it was started with state funds) and in part a private enterprise (as its activity is subject to civil law and is regulated by the laws of the market economy). At present the INI is a direct shareholder in 66 leading companies of the industrial and service sector and through them it is indirectly interested in more than 200 companies. This holding contributes more than 10 per cent to the gross national product of the country, 5 per cent to industrial employment, 16 per cent to industrial export and almost one-third to industrial investment (1977 data). Its share is 33 per cent in the petrochemical industry, 16 per cent in power plants, 45 per cent in steel production, 56 per cent in the aluminium industry, 62 per cent in coal production, 92 per cent in shipyards, and it is in the range of 50 per cent in truck manufacturing, depending on type. Its sphere of activity is most diverse also in the fields ranging from the food industry to tourism and from machine building to forwarding by air and sea.

The economic political objectives pursued by INI were formulated by T. Galán as follows: a) macro-level anticyclical actions, b) industrial reorganization, c) actions contributing to regional balance, d) stimulation of employment, e) safeguarding of strategic sectors and expediting their growth. The INI is self-financing and profitable. A remarkable analysis was made by the author in the debate following his lecture about the advantages of government influence exercised through the holding over direct state intervention. As he noted, private enterprises usually do not spend the direct state subvention on what the state would expect. Therefore some form of state control is absolutely necessary. The holding can control with its instruments – through its participation in the business – the enterprises better than any ministry.

In the Italian system – presented in the paper of A. Marsan – several holding companies operate. IRI is the biggest of them. It founded its influence by buying up shares with state capital in the years of the Great Depression. By the bank reform of 1936, also commercial banks were put under the control of IRI. It began its industrial activities by setting up sub-holdings in 1933 in the building of the telephone network and in 1936 in the management of naval companies. In 1937, a big investment project followed in the steel sector then came the reconstruction project of the engineering industry. After the war, beside IRI's pushing forward in the engineering and shipbuilding industries, airlines presented it with a new field. The building of the biggest southern integrated steel works with more than 3 million tonnes capacity, the building of the Autostrada del Sole on the basis of concession, the building of a new plant of the Alfa-Romeo automobile works, etc. are attached to the name of IRI. ENI, the second holding company created in 1953 (Ente Nazionale Idrocarburi) was originally set up to explore crude oil and gas deposits and to provide supply, but since then it has extended its sphere of activity not only to the whole petrol-chemistry but also to the textile industry. The third state holding company EFIM (1962) joins small companies engaded in the engineering industry which had only nominal independence since the post-war difficulties of reconstruction but were actually dependent financially on *ad hoc* state funds as from 1947. Later on the sphere of EFIM was extended over medium enterprises and it also set up works in the South in cooperation with ENI. Finally, in 1971, the EGAM was set up which joins mining and metallurgical enterprises which used to be under direct state control.

The four Italian holdings participated in the implementation of several important economic political objectives of the state. The prominent ones were, beside the industrialization of the South, the creation and extension of new branches of strategic importance (such as electronics and nuclear engineering industry).

The conceptual model of the system was elaborated, mainly in publications around 1962, by P. *Saraceni,* a key figure of IRI ever since its birth. One of the essential elements of the system is the following: the special costs of not economic (social) objectives expected by the government from the holding must be covered by the government from a fund formed for that purpose. "If parliament wanted to tell Alpha Romeo to move to the South, in order to create employment in a depressed region, it would have to know what amount of subsidy was needed, for how long, and it could then decide rationally whether the honourable goal was worth the cost." (p. 160) The programming of such objectives and the extent of refund is a subject of negotiations between the holding and the budget. The representative of the holding must be sure when accepting the task that the enterprises will be able to accomplish it from the fund without risking their profitability. The novelty of this system is the strictest possible separation of the costs of social objectives.

E. S. *Savas,* professor of Columbia University, in his paper "Comparative costs of public and private enterprise in a municipal service", reported on an economic investigation made into a subject which may be astonishing at the first glance but which was done most thoroughly on the efficiencies of different methods of organizing the collection of garbage. Different combinations of organization by city administrations and private undertakings developed in the American practice and these were assessed with the help of many research workers. It is worth while to quote the most practicable finding of Savas about the reason why the removal of garbage as a service administered by city authorities usually appears to be more expensive than as a private undertaking. When organized by urban authorities, 1. the staff is bigger, 2. the percentage of absence is higher, 3. fewer households are served per hour, 4. incentive methods are less widespread, 5. the vehicles used are of smaller capacity, 6 drivers of vehicles usually do not help in phys ical work.

Organizations of groups ownership (cooperatives) which may be regarded as an intermediate form between state and private property were given little consideration if compared to their importance, perhaps the title of the conference stood against it, although Lord Kaldor noted in his exposée that many economists

all over the world were convinced that this would be the form of the future.

There was a single paper devoted fully to such organizations, namely, the work of Haim *Barkai* (Hebrew University, Jerusalem) on kibbutzes. Barkai repatedly emphasized that the circumstances of the forming of kibbutzes, the ideological standing of their members and the conditions of their functioning were extremely specific. Answering a question of Márton Tardos, he also stated in the debate that in spite of their economic efficiency the kibbutzes could not be expected to spread too widely for that was a movement of the élite minority. (At present 3.8 per cent of the population of Israel are participating. In 1940, at the time of the peak, this share was 6 per cent.) The system is essentially as follows: there are not income differences between members whether they hold leading or subordinate position, whether they are capable of producing much or little. The kibbutzes take a stand in a century-old economic dispute with their existence and development, proving that it is possible to induce maximum effort, to expect enterprising spirit and to pursue efficient business without financial incentive on basis of informal expectations of the community. However, experiences also show that only a relatively little fraction of the population is suitable for this purpose. Participation in kibbutzes is perfectly voluntary and thus a natural selection takes place: he who attaches his efforts to its financial reward and who cannot dispense with this attachment will soon quit the kibbutz. Otherwise the kibbutzes play a far more important role in the Israeli economy than their relative share, their rate of accumulation is extremely high and, accordingly, their stocks of fixed assets and their up-to-dateness are prominent, and per capita incomes and personal consumption are also high above the national average.

Finally, it must be mentioned that the representatives of developing countries rather unanimously advocated the advantages of state ownership and the importance of state planning in their lectures and in the debates. This is natural. Private capital withdraws and refrains even in advanced countries when the development of new branches of industry, implementation of new technology, ie., risky ventures are to be faced. In the developing countries even less may be expected from private capital which is usually scattered and invested chiefly in commerce and to a smaller extent into domestic industrial activity. The assessment of the role of foreign capital and the problems of its state control are raised by the development of the extracting industry till now and in the future. The main problem is the creation of up-to-date large-scale industry which cannot be imagined without an active role of the state and without the creation of state enterprises. The above justify the definite attitude of economists of developing countries advocating the efficiency and planned development of state ownership. However, it is also apparent that the regulation of the spheres of authority of state supervision and enterprise management and the organization of relations between them are hardly considered as yet as a special question with respect to state enterprises; there is hardly any indication that the autonomy of the business management of state enterprises is an important condition of efficiency. This is shown by the papers of Armando *Labra* of Mexico, E. *Sacristán Roy* also of Mexico, and T. N. *Srinavasan* of India.

W. Baumol described the conference as one held on questions lacking an established theory and even short of empirical research findings. He modestly denoted the task as preparing for drafting the future research plans into the subject. In his closing speech he actually enumerated the main problems that need further analysis. Instead of quoting this in conclusion – admitting the importance of integrating this subject into economic theory – let us rather draw attention to the practical benefit of the conference: it was a forum of an important exchange of experiences. This way it became a fertile hotbed for economists of countries functioning under various economic conditions to nurture new ideas about the relations between state, state enterprise and private enterprise; about the variety of possible combinations, the possibilities of their application, and the use their own country could make of all of that.

I. SCHWEITZER

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