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THE NECESSITY FOR CONSOLIDATION OF THE ECONOMY AND THE POSSIBILITY OF DEVELOPMENT IN HUNGARY

R. NYERS–M. TARDOS

Since the 1979 change in the direction of economic policy, consolidation of the balance of trade has made considerable progress, but has not yet ended in Hungary. The desired turn in economic performance has not come. In laying down the economic policy of the coming period, the alternative is the following: either economic changes are minimized, which involves less social risk in the short run, but more in the long run, or economic changes are accelerated, which is a greater risk in the short run, but could render development more secure in a longer perspective. The article examines the possible economic and social consequences of the decision alternatives.

Today it is clearly realized that in the late 1970s the Hungarian national economy came to the end of a long, almost twenty-year development phase and, in a certain sense, even went beyond, for in the last four or five years it was growing along a path that has no continuation into the future. After a certain period of hesitation, in 1978–1979 economic policy was successfully adjusted to reality, and unbalanced growth slowed down. Of course, ideas underlying economic policy changed first and to a greater extent, and practice followed more slowly and partially simultaneously. Adjustment to the different foreign (socialist and non-socialist) markets has taken place gradually and is not yet satisfactory. The 1981 crisis in international credit relations was a new blow to the Hungarian national economy already in a difficult situation. As a matter of fact, the economy got into a kind of pre-crisis situation, while the political situation was calm and stable, and economic management proved to be able to act.

The balance of five years

In 1979 three objectives were formulated as general aims of economic policy: first, consolidation of the foreign economic situation, second, (depending also on the first) preservation of the political stability and confidence, and third, (depending on the first two), preparation of a new growth path. It is equally important to accomplish all the three tasks, yet it is beyond doubt that in the order of urgency the first two preceded the third, especially three or four years ago. The degree of difficulty of the tasks is in itself important, yet the greatest difficulty arises from the fact that the three objectives are interrelated, while in the process of realization they have a restrictive effect on one

another. The transitorily unavoidable import and investment restrictions have a retarding effect on the preparation of the new growth path, and the latter, by putting emphasis on efficiency, necessarily strains political stability in the micro-economic sphere, and not infrequently it also occurs that the interest in political stability puts a brake on the two economic processes.

Five years are now behind us since January 1979, and we are therefore in a position to analyze, on the basis of a repeated occurrence of economic processes, the favourable facts and results, and can compare them with old or new unsolved problems.

Favourable developments can be noted in a few important questions which are leading in the order of urgency. Further, in a few cases such correct central initiatives have been taken which directly promote the future development of the economy. Hereunder follows a summary list of the economic achievements:

– The serious deficit of the balance of trade has been eliminated, a global equilibrium been restored, the balance of the two main markets or accounting relations is also found to be satisfactory. In 1978 total exports covered the value of total imports up to 78 percent, in 1982 up to 100.5 percent, and in 1983 this rate improved to 102.5 percent. During the same years, the coverage of imports by exports grew from 70.4 percent to 115.0 in convertible currency-markets and from 88.9 percent to 92.6 in the rouble trade– under worsening conditions and deteriorating terms of trade.

– In the critical years of 1982–1983, Hungarian solvency on the international market was successfully maintained, although the terms of trade for Hungary were deteriorating, and debt services grew by more than 25 percent.

– The budget balance has been improving year by year, and by 1983–1984 revenues and expenses became practically balanced.

– Protection of the living standards and efforts at a possible improvement of living conditions may be said to have been basically successful. Although it is open to question –and should be so–whether living standards attained in the 1970s could be preserved on a social scale, it is beyond doubt that the economic policy has a character preserving living standards, the recurring unpopular measures notwithstanding. All this shows to be an important achievement in awareness of the serious economic difficulties threatening living standards.

– Some positive signs show also in economic performance. Good results have been achieved in energy saving, in the reduction of per unit material consumption, and in the economic utilization of wastes.

– In the changes a certain role has already been played by the improving tendency in the enterprise organization system of the socialist sector: several forcibly centralized mammoth organizations have been broken up into their natural units and they are prompted to work more efficiently. The earlier form of an all too divided industrial control has been eliminated, and a uniform Ministry of industry has been established, with the potential of a better industrial policy and control. The licensing, encouraging and fitting into a centrally regulated framework of the different kinds of

small enterprise are an important step towards improvement of national economic efficiency, the future security of employment, and improvement of living conditions.

In addition to efforts within the country, foreign economic diplomacy has played an increasingly important part in shaping the foreign economic situation. Short and long-term interests are equally served by Hungary's joining the international financial agencies of the UN, and its active participation in GATT. In the CMEA Hungary has taken initiatives, and with the Western European economic communities it tries to improve the contents of the relationships (this has brought little success so far).

On the other hand, there are also quite a few unfavourable phenomena. They arise partly from the partial character of the changes, and partly they are the symptoms of lasting deficiencies. They do not neutralize the achievements, only cast a shadow on them, and, the other way round, the achievements do not neutralize the problems: the latter want solutions independent of the achievements, what is more, for the sake of making the achievements lasting. Let us see the factors that have caused tension during the last years:

– The balance of trade is secured to a smaller extent by a general improvement of economic efficiency, and to a greater extent by restrictions on imports, investment, and credit, and these release effects in the whole of the economic regulatory system that put a brake on enterprise. As it is today, without an essential change, the economic control system is not suited to well serve and stimulate economic development. The all too frequent, inextricable, and often all too particular central intervention is a hindering factor for enterprises.

– No development shows in market conditions, on the contrary, rather a stagnation appears. It is only the food market where equilibrium is satisfactory, while the market of industrial products is often in a state of disequilibrium. No real competition has evolved so far in the economy, prices are usually not quoted in view of competition and, therefore, enterprise profit cannot adequately approach the actual economic efficiency. The most serious problem arising from this is that enterprises are only pressed by the central restrictions, while from the market side no real pressure comes to increase efficiency.

– Although the spreading of the various small ventures has had a clearly favourable effect, it has caused tensions that their more or less free market sphere was getting official recognition at a time when big enterprises continued to work on a simulated and over-regulated market. On the two different markets, organizations and individuals work under too widely differing conditions, especially in regard of performance and income. Therefore the socialist enterprise organizations are frequently not able to challenge the small organizations to competition.

– No doubt, the restrictive policy pursued since 1979 has considerably increased idle capacities. After 1979, 1 percent of production increment in industry has been achieved with three times as much entering capacity, than in the preceding period. In the building industry the situation is even more unfavourable. The most important cause underlying this situation is to be found in a regulatory insufficiency. It is an error of

regulation that the interests of industry are invariably contradictory in labour management. While a part of enterprises struggles with labour shortage–especially in highly concentrated settlements–it has also enjoyed the advantage of labour migration in recent years. Namely, owing to the peculiarities of wage control and other reasons, it could raise wages for the remaining labour without much effort, and without being compelled to counterbalance the flagging demand for its products by introducing new products and acquiring new markets. On the other hand, industry has remained invariably interested in keeping the ineffficiently employed. This particular tendency involves the risk of developing a so-called restrictive spiral in the Hungarian national economy in four or five years. And this spiral means that the self-generating and reproducing restriction of resources and consumption –always justified in a given instance– produces, in a process of several years, an effect contrary to intentions. Today investment, imports and consumption are restricted with a view to efficiency. However, if that is all that is used to influence production, if diminishing demand does not encourage production to swing up, tomorrow efficiency may already decrease again because of restrained consumption.

– With a low growth rate, tension arises in the field of social benefits. It is a characteristic fact that in Hungary the share of social benefits in the net national product has grown from 16 to 24 percent since 1970, and from 23 to 32 percent in personal incomes, and yet social criticism on the subject has not diminished but rather grown, especially in the last years. The grants have a limiting effect on labour income, that is, on the growth of real wages; besides, they do not satisfy needs, which is not simply a result of exaggerated demands, but of the fact that the systems of distribution and social policy practice are in several respects disfunctional.

On examination of the political impact of the economic events in the last four or five years in Hungary, the general conclusion may be drawn that the increasingly difficult situation has not strengthened, but neither shaken political stability. The burdens are distributed among the various social groups, rather evenly, with no exaggerated differences.

In connection with economic problems, increasing criticism can be found in three social groups. Dissatisfaction is growing among managers and the technical staff because of economic restrictions and bureaucracy. Young people are dissatisfied because of their difficulties in starting a career and in founding a family. And in a part of intellectuals it is the not or hardly improving situation of the socially handicapped groups that provokes anxiety.

Development options

Reverting to the general objectives of the present time, we can say that consolidation of the foreign economic conditions has progressed considerably, though it has not yet been completed. Political stability and confidence have been preserved, yet we cannot know, whether we are not to expect further shocks. Further, the desired turn

in the improvement of the performance of the Hungarian economy has not yet come, which all amounts to saying that the economy may easily become unstable; and the preparation of the new growth path is a task still before us.

What are the options, from which we can select the economic policy of the coming period? The problem is being reviewed by Party and government committees which prepare decisions affecting the whole economy. Nevertheless, we are of the opinion that it is worth-while to scrutinize the problems to be decided publicly and to say our opinion of the alternatives. In the given situation, either we choose to minimize economic changes, involving less social risk in the short run, and more in the long run, or we can undertake to accelerate economic changes necessary in a long perspective, which involves a higher risk in the short run, yet would render the situation more secure in the long run.

Minimization of changes would mean, roughly, the following: to channel, at a rate hardly faster than so far, the flow of social labour and capital towards more efficient activities; to increase exports, with a slow structural change in adjustment to the enlargement of foreign markets; to accelerate import substitution; to further develop certain aspects of economic control and management, yet leaving today's conditions unchanged in a wide field; to mitigate, but basically maintain, the system of import, investment, and financial restrictions, resigning to the shortage market, and to keep home consumption, permanently and essentially, at a lower level than the net national product. All this might contribute to the consolidation of the foreign economic equilibrium, at the same time, however, it would hardly bring any improvement in the mainstream of the economy and would slowly melt down the "capital" of political trust.

Acceleration of economic changes would amount, roughly, to the following: to reduce and later to eliminate the restrictive character of central regulation by accelerating the flow of labour and social capital, and by a further comprehensive development of the economic control and management system, to enlarge foreign markets for the Hungarian industrial and agricultural products through a fast structural change of exports; to eliminate shortage on most of the commodity markets partly by an efficient home production and partly by enlarging imports; to increase home consumption, slowly and gradually, and to approach it to the net national product; to keep the use of external sources (credits and working capital) first at today's level (reducing their ratio to exports), and later to increase it reasonably. All this would create the foundations for an effective consolidation to take place not only in the foreign economic position of the country, but also in the domestic economic conditions.

Should we concentrate on starting an efficient development or on maintaining the existing social conditions?

Before going into the discussion of the possible economic policy and economic alternatives, the question has to be asked again, if it is possible to break out of the present tense situation. In our opinion, a clearly positive answer can be given. Our earlier similar

standpoint [1], however, has to be rendered more precise. At the beginning of 1979 there still was ground to believe that, with a definite change in control and management, living standards achieved and within them, real wages, could be maintained. We could think that living conditions, not deteriorating but rather improving, would provide such help in creating an atmosphere stimulating recovery, that it would be worth taking the risk of even further debts. This possibility was, however, eliminated by a further deterioration in external conditions, unforeseen at the time. Today additional resources are to be looked for exclusively in our own performance and income producing ability. Because of the delay and mistakes made earlier in the course of adjustment, the Hungarian economy cannot keep its present position in the world without additional efforts. As a consequence of the debts weighing heavily on the country, today it is a difficult task, fraught with risks even to avoid the danger of being left further behind. If, however, under the present transformation of world economy, we opt for a strategy of retreat, that is to say, if we do not subordinate economic policy and the social conditions of management to increasing performance but the other way round, try everything to keep economic policy changes and their effects causing social tensions between narrow limits, it is very likely that this will have to be paid for by a serious lag. A standstill in economic growth and a further lag can only be avoided through the unfolding of the creativity of the individuals and of the organizations.

Why has this creativity not asserted itself more up to now, and how can it be mobilized in the future? To the question no other answer can be found than that the existing economic conditions have so far not encouraged serious efforts, nor have they provided any stimulation to increase the efficiency of work. This cannot be changed by words or exhortation. If, therefore, we cannot expect a favourable turn in external conditions, our only hope rests in changing the conditions of management.

And yet it is not simple to develop a new strategy. Because of the conditions limiting the scope of action, it is extremely difficult to solve this task, itself carrying contradictions. The autonomy of state and cooperative enterprises has to be increased, the scope of action of the small enterprises has to be stabilized and legalized, and all this has to be achieved parallel to a further reduction of domestic consumption.

While it is already difficult to reconcile the liberalization of enterprise economy with the policy aimed at reducing domestic consumption and tightening the purse-strings, a few further factors make the task even more difficult:

– It is beyond question that the social achievements so far made rely on the firm basis of good relationship between government and people. Society has accepted the policy pursued among other things because it has provided for growing welfare, security of employment, and supply by and large coordinated with demand. It follows directly that this historically favourable basis has to be preserved as much as possible.

– It is also beyond question that a significant change in the reform course is not taken without reserve by many in the domestic policy and some even show a lack of confidence. And some international factors also put on brakes. The importance of the problem has been clearly shown by the uneven progress on the way of reform: upswings

followed by standstills and even retreats. It is, therefore, to be expected that a consistent realization of the reform leads to a danger of and a fear from undesirable byproducts as e.g. lasting fast price increases and, in consequence, a restructuring of incomes, the closing down of improductive establishments and difficulties with the new methods of reallocating labour.

The above-said make it clear that it is not a simple task to choose between the economic policy options. The country cannot be guided to an efficient course of development by jeopardizing social stability. Social stability is the precondition of any favourable turn. At the same time, one cannot insist in a conservative manner on the historically developed factors if they block the way to accelerating development and improving efficiency. Between the two rival social aims, i.e. economic change or social status quo, the first has to be–and can be–preferred, also maintaining social stability, while changing its actual conditions.

Further, we need not, what is more, we must not insist on certain values, or on certain social norms qualified as such, since they have created a "lukewarm" social climate, which has put a limit on the self-expressive and creative potentials of social groups important politically as well as from the aspect of economic progress. The interests of these groups full of creative abilities and wanting to earn higher incomes are to be given preference, even if the discontent of groups accustomed to security will grow as a consequence of an at best stagnating consumption and of a forced change of behaviour.

The results of economic development achieved in the last years can be made lasting only if the restoration of the upset financial balances is followed by permanent and efficient development. Those temporary successes, however, are of a dubious value and lead in the last resort to failure which, though based on certain good slogans, yet serve the preservation of legacies inherited from the pre-1968 control and management system and hinder the adaptability of the economy. It must not be allowed that the well-grounded caution in the progress towards an efficient growth path be mixed up with the conservatism referring to an extraordinary situation, in fact, however, averse to change. Social and political institutions, among them trade unions carrying on negotiations with the government should not strive for a minimum of change in the existing situation as regards price trends, wage regulation, and employment policy, but in the first place for the protection of workers' income in the short and the long run. The fact must be taken for a starting-point that more can be distributed from better economic results and in such a case even the possible social injustices of income distribution are more tolerable, and/or greater efforts can be made in order to solve them.

Development policy adjusted to changing demand, or concentration on a few development projects?

Management problems in Hungary are made more difficult to solve by the great scarcity of investment resources. Of course, even when 30 percent of the Hungarian national income* (41 percent of the GDP) was spent on accumulation, it was still felt that development resources were scarce. However, reduction of the means to be used for development has not lessened but rather increased our troubles.

Exactly for this reason, we are of the opinion that, under the present conditions of a limited use of scarce resources, when 13–15 percent of the net material product –24 percent of the GDP– are accumulated, a qualitative improvement in the selection and implementation of investment projects may open the way to economic growth.

The grave scarcity of investment resources suggests to many, almost in a peremptory manner, that resources should be used in a concentrated way, and a fragmented development must not be allowed. This therapy so obviously suggesting itself, however, drives thinking towards dangerous roads. A spectacular development success would in fact be winning, and several fields of the economy offer such opportunity. Of these, we shall mention only two. The increasing price of primary energy has enlarged the development possibilities of Hungarian coal mining and it *quasi* invites to a large-scale substitution of coal for imported energies. The fast development of electronics and Hungary's lag provide an almost compelling argument for our taking some really effective measures with a view to diminishing the technological gap.

The preceding arguments can be contradicted only with a heavy heart. As long as the export potential is weak, it is not justified to speak against import substitution. It is true as well that the electronic revolution has enormously increased the impeding danger of a lag, and thus it seems to be useful to prevent a further deterioration of the situation through large-scale and concentrated efforts. However, the situation as it is does not offer, for the time being, any favourable possibility for large-scale actions, and for two reasons. On the one hand, concentration of forces from the largely diminished resources would cause serious losses. Small complementary efforts are better corresponding–as we shall see–to the present conditions. On the other hand–and this relates mainly to the development of electronics–neither the CMEA markets, nor the world market offer an opportunity to select and successfully carry out actions demanding international cooperation and creating an export potential of importance. In the internal CMEA trade only a slow development is to be expected and the Western markets are not prepared to absorb any sudden growth of sales even in a period of boom.

At present, a great amount of assets are frozen, since there is no demand for the output planned at the time of the investment decisions. These assets are, however, valuable, only the way has to be found whereby they could be used for the development

*MPS, i.e. the net material product (Ed. note)

of such products which are in demand. For such mobilization of assets, new channels of capital reallocation have to be opened. This has to be promoted by a financial change which would either encourage enterprises to use efficiently the frozen means of production, or compel them to sell these, that is, to cede the unused assets to other enterprises or small ventures.

Several other questions of investment policy are to be answered as well, concerned with long-term economic policy and only touching on the alternatives of outbreak or retreat. Of these, first of all the infrastructural lag, the housing shortage giving rise to serious social tensions, and the development of a strategy of adjustment to the terms of the scientific-technological revolution are to be mentioned. About these grave, uncleared, or not sufficiently clarified problems, only so much can be said now, that as long as maintenance of the country's solvency and of normal living conditions of the population cause acute tensions and threaten with a social crisis, no adequate solution can be found for the long-term strategic questions, but only the security of supply can be maintained. The strategy of catching up with the leading countries will only be possible if the threat of economic instability can be satisfactorily eliminated.

Significant changes in the economic management backed by institutional decentralization. or only further development of some parts in the functioning system of the regulated market?

The changing economic results of the last sixteen years have shown that the regulated market is more apt to satisfy needs, than directive planning combined with economic accounting (or, in other words, directive planning combined with khozraschet), but they have shown as well that a few other legacies of the centralized and hierarchically structured economic and power system also impede an efficient satisfaction of social needs. As a matter of fact, the institutional remnants of directive planning constrained in Hungary that effect of the market which could have prevented wilful central measures. That is one of the reasons why the market had not played a decisive role in setting constraints on expenditure as long as it was possible to obtain cheap credits.

The use of regular control interventions inherited from the old system of control later enabled a fast reduction of the deficit in the balance of payments and in the state budget, but failed to provide the grounds for an efficient development and for the establishment of a close link between growth and equilibrium. Therefore, through a modification of central regulations and preferences, such conditions must be established for state and cooperative enterprises as enable them to satisfy the demands of production and consumption on a high level and to mobilize people's creativity much better than so far. In our opinion, changes are needed in three directions:

– an economic regulation essentially moderates the restrictions of enterprises in the management of wages and imports, and increases their freedom in determining prices;

– the informal and occasional interventions of state organs into enterprise manage-

ment questions must be radically reduced and the role of territorial social organizations in economic control has to be reinterpreted;

– a solution must be found for the institutional and supervisory aspects of enterprise autonomy.

An essential increase of the degree of freedom of enterprise management can be realized if more efficient means are found for keeping the aggregate demand between planned limits, if the state subsidizing of unprofitable production is not allowed any more, if harmony between the production potentials of the country and demand is secured through the development of the price mechanism; and if the exchange rate of the forint is shaped in view of the balance of payments, if wages are considered such costs as the price of other production factors and the role of wage control is considerably reduced. And, finally, if the freedom of price setting enables the enterprises to charge their overhead costs to the products in accordance with the ability of the latter to bear costs.

This means, at the same time, that the income taxes imposed mainly on profitable enterprises are to be firmly suppressed and, instead, the role of efficiency-stimulating taxes on resources must be strengthened.

If the above-mentioned changes are implemented and the role of money in the economy grows thereby considerably, the still not optimum producer prices and the profit determined by them can be considered as the main and "objective" measure of enterprise activity. Thus, the long declared objective: to place enterprises under the control of market forces, can be finally achieved. If one of the units of an enterprise incurs losses under such circumstances, or the receipts of this unit do not even cover the variable costs, the firm cannot do anything else but either completely reorganize or close down the unit. The same consequence must follow, if the whole enterprise goes bankrupt. Yet the closing down of the unit and the bankruptcy of the enterprise must not be anything else but a onetime fast replacement of a smooth and efficient adjustment to demand. Efforts must be made that the closing down of a unit and the bankruptcy should be followed soon by a new and efficient mobilization of resources and labour by all means.

As for state intervention, one has to put up with the fact that in an economy in which the trade in products had been for long decades managed by administrative methods and which, since the elimination of directives, has largely relied on an informal system of relations with state administration, all instruments of state regulation other than financial ones cannot be given up overnight. This is not necessary, either. However, today's practice of administrative intervention must be radically changed. No independent and resolute economic behaviour is to be expected from enterprises as long as they do not know, when, in which field, and by what means the administrative organs are going to intervene–often informally–in their lives. Therefore, the present practice of interventions must be firmly rejected. For this end, the sphere of market supervision must be clearly separated from the sphere of proprietory authority over the enterprise. Further, the market regulating authority of the government organs must be enacted by law. The

range of commodities has to be codified, the trade in which can be directly controlled by administration, by means of general or individual prohibitions. It has to be clarified, too, in which cases instructions can be given to an economic organ. It is not enough to declare that no instruction can be given in such cases in which the purpose of the intervention can be achieved also by economic means. The rights by which instructions can be given must be enacted and it has to be achieved that the legal security of firms be thus enhanced essentially and that the responsibility of government be enforced.

Besides, legal protection of the enterprise against possible unlawful instructions must be provided for, so that in such cases enterprises can assert their claim for compensation before the court, under the civil law. It would be to the purpose, further, to extend the practice of compensation and the settlement of actions for damages under civil law to the case of each individual instruction.

The question of asserting the proprietory and supervisory rights over the enterprises gives plenty to think about. However, the conflict between state property and independence of state enterprise on the market is not impossible to solve. The proposition to bring about enterprise councils (boards) with the major firms and to increase the role of the collective in smaller ones seems to be an important step toward solving the question. We think, however, that the direction of the changes wants clarification on a further point. In our opinion, separation of the proprietory tasks of the state from those of state administration will be successful only if those authorized to exercise the rights of disposal assert the proprietory points of view. That is to say, if they control enterprise management with a view to the growth of the real value of enterprise capital and pay no attention to the multitude of viewpoints of state administration confusing and puzzling for the enterprise, which have to be enforced through economic regulation and legal supervision.

Output-orientated income differentiation, or preservation of the given income structure?

In 1979 the leadership set the political target of maintaining living standards and within it, of full as well as efficient employment. The actual contents and interpretation of this programme, however, have not been cleared. It was supposed that after the reduction of real incomes in mid-1979 no similar decisions would follow. It was also supposed that the reduction of real incomes in the second half of 1979 under the impact of central price measures did not run contrary to the slogan of maintaining living standards, if the average 1979 income would not lag behind the average 1978 income. Finally, from the state plans and arrangements the interpretation is evident that maintaining living standards was not in conflict with a decline in the real value of labour incomes and within them of real wages.

As a consequence of worsening conditions and the unsatisfactory development of Hungary's economic performance, the 1979 restriction of consumption has been followed

by the 1983–1984 restriction, again implemented basically through central price measures. It has become clear, too, that society has endured the restructuring of incomes concomitant with stagnating consumption and the 6–7 percent fall of real wages between 1978–1983, as well as the somewhat lowering standards of commodity supply, and it will probably endure a further deterioration of real wages in 1984.

Yet it has become just as clear that the Hungarian society knows about the real processes taking their course behind the policy of maintaining living standards. Further, the particularly important change had to be realized that the moderate reduction of the real value of labour incomes relates, naturally, only to the average, and thus the situation of many is worse than the average. At the same time, it has to be noted that the growth in the amount of social benefits deriving from the fact that new pensioners get higher pensions than the average and those with lower pensions are dying out is not regarded by the population as an improvement, or a factor counterbalancing the reduction of real labour incomes.

The essential point differing from the earlier assumption is that the periods of restrictions have brought no improvement in economic efficiency. What is more: the control of earnings aimed at a reduction of real wages hindered big enterprises in distributing wages according to performance and thereby in stimulating for better work during the working hours spent in the first job. Therefore, a peculiar situation developed in the industrial and construction enterprises. Diminishing demand, and the deteriorating utilization of the still growing fixed assets did not lead to dismissals, but to a situation where not even the diminished demand was satisfied, with reference to labour shortage. In this way sellers could keep their superiority on the market even during the recession. Under such circumstances, the government could achieve an acceptable quality of commodity supply on the home market, the substitution of decreasing imports by domestic products, and particularly the growth of exports only by means of occasional interventions becoming regular, and through informal pressure.

The enterprises avoided an unambiguous decline of their performance, and more or less satisfied government expectations in a way that, on the one hand, they availed themselves of the possibility to shift from the "average wage control" over to "wage-bill management", which allowed them to increase nominal wages also with decreasing per unit receipts, without the prohibitive taxes disturbing their situation. On the other hand, the creation of enterprise business partnerships* opened for many enterprises the way out of the rigid framework of wage regulation, so that they could link their interest in output with the efforts of workers wishing to earn higher incomes and ready to sacrifice their free time and work harder for it.

It has remained an issue, however, whether it is not possible to better coordinate the restrictive income policy with efforts aimed at increasing efficient production. For this end, however, a more complex living standards policy and corresponding institutional changes are needed.

*Cf. paper by T. *Laky* in this issue. (Ed. note.)

The wages management of enterprises ought to be freed, with a strict regulation of total demand following from and coordinated with the general economic situation. The increasing income- and cost-sensitivity of the autonomous enterprises will force

– a reduction of the still existing "indoor unemployment"* and

– an economizing wage policy, which is not identical with a strict control of earnings.

The planned and strict aggregate demand management would ease not only the strictly binding wages management, but also the rigid price controls. Freer changes in prices are important means for improving enterprise adjustment. The use of this means, however, would undoubtedly open the way to inflationary tendencies so far administratively constrained. It would be too much to assume that a restrictive control of demand alone can keep spontaneous price increases between today's limits. Therefore, if we wish to increase enterprise freedom in price setting, while simultaneously restraining inflationary tendencies, today's practice cannot be considered a fortunate one, in which the greater part of the consumer price increase is implemented through central price measures. Therefore, the policy does not seem to be expedient which constrains personal incomes in most part by reducing state subsidy on consumption, that is, through centrally decided consumer price increases. The reason why the consumer price subsidies should not be radically reduced at once is not that this does not help to solve the central problem and does not improve the enterprises' economic situation. The central price measures (raising of essential food prices, etc.) hit, namely, first of all the poor who are most in need of protection, and this makes–without justification–social tensions arising from economic difficulties into a direct conflict between government and the masses. Instead of reducing the consumer price subsidies large-scale, it would be better to fix their measure, allowing a rise in consumer prices, if production costs exceed the total of the price and the fixed subsidy.

The changes in employment policy, wage control and price policy as described above make new demands on the organs entrusted with safeguarding the interests of different social groups. It will be necessary that these organs, and within them trade unions, reconcile their views on the living standards policy not only with the government. Under the new circumstances, it is necessary that the negotiations settle not only the question of the lowest wages and pensions and of their regular raising following consumer price increases, but also the question of a qualitative improvement in the safeguarding of interests at shop-floor level. The trade union organizations have to represent the interests of its members with much greater firmness than today in the inevitable controversies between enterprise management and workers, especially in matters of wages, wage differentiation, and dismissals.

*This is the ironical name given in Hungary to the underutilization of labour in factories or disguised unemployment. (Ed. note)

How should we interpret the preference for the social security of the people?

The almost forty-year development of the Hungarian society teaches us, among other things, the important lesson that the growth of production, and improvement of the country's position in the world should not be set against the satisfaction of individual demands, the development of infrastructural services and of the housing situation, the care for the old, or protection of mothers and children. Therefore, the slogan of the fifties: "Don't kill the goose that lays the golden eggs" cannot guide us in the questions under examination. In the early 1950s the sudden fall of real wages, and deteriorating supply caused well-known social disturbances. In our days, still, the low standards of infrastructural services, the large gap between the social demand for housing and the housing supply, and the high number of unsolved problems in the care for the old, and the protection of mothers and families are sources of considerable tensions and hinder progress. From the fact, however, that it is not allowed and even disturbing, to confront with each other various social objectives, it does not follow that the achievement of each social objective laid down and justified in itself is to be envisaged simultaneously and with similar efforts. It is perfectly justified to establish preferences among the objectives, but it is also very difficult, particularly, when the growing tendency of resources available for distribution falters. It is much more difficult to distribute a smaller amount in an acceptable way. We must be prepared not only for that the already unsatisfactory rate of implementation of social policy aims will slow down in one field or another, but also for that accepted social policy achievements will have to be questioned, in general, or at least for the present period.

Two such objectives should be mentioned here: job security and price stability. It is one of the achievements of socialist economy that it has been able to secure, almost everywhere, the right to work, that is, it has succeeded in providing for full employment. This has to be fought for even during the hard years of economic consolidation, and it is our conviction that it is possible to avoid a general unemployment keeping people out of production for some longer time.

There is, however, an element in the present practice of employment, whose justification is to be questioned in general, and today in particular; i.e. job security. Demand for products and services is, namely, continuously changing, and this can be followed only by continuously changing the order of work processes, workshops, and enterprises. The order of adaptation developed in the past and still prevailing entails a positive and a negative consequence. First, it does not necessitate dismissal initiated by the enterprise, and it is used only as a rare exception. The lack of enterprise dismissals has for consequence not only that poorly working people can misuse, often to the disadvantage of their colleagues, the inertia of the management system, but also that one is reassured of being able to keep his job until his pensionable age, unless he commits a "capital" offence. In regard of the demands of adjustment to the changing world, and

especially of the unfavourable position of Hungary, this cannot be further maintained. Efforts are to be made also in the future that demand for labour should exceed labour supply. However, the worker's security cannot be appraised so high, that a loss-making factory or even an enterprise be not closed down as long as a suitable job has not been found for each worker. This is, of course, not so today, and cannot be guaranteed for the future, either. Yet such kinds of commitments have so far withheld the government from taking a lot of important measures. With a view to creating the institutional conditions for labour mobility, the first steps have been made, with a long delay, with the introduction of the support for retraining, but this form–helping only those affected by a centrally organized regroupment of labour, and therefore not having grown yet into an organic part of the Hungarian management practice–does not solve the basic problem: the support of those left temporarily without a job, and this cannot be circumvented, either. In any case, we have made the first steps on the thorny path–unpleasant for many–which we have to follow, if we wish that modern production and commercial organizations well adapted to demand come into being, and that the economy make a recovery.

The second important question affecting society is inflation. Price stability has for long been recorded as a success of the socialist economy. However, a rigid interpretation of this had to be paid for dearly. As a matter of fact, price stability had an important role in the development of a shortage economy. Since 1968 the Hungarian economy has made important as well successful steps to reduce shortages, and in the meantime, unfortunately, ever higher price increases have become necessary. The rise in prices in Hungary is a special case of inflation.

The rate of the rise in prices, what is more, most changes in the price structure (the relative prices) are, namely, consequences of deliberate price movements laid down in the plan, that is, of so-called central price measures. It is further characteristic of this process that the party and the government previously collate the changes in prices with the institutions for safeguarding of interest (the National Council of the Hungarian Trade Unions, the National Council of Producers' Cooperatives, etc.) The "advantage": these price measures are not equal to price movements directly reacting on market demands i.e. on changes in demand and supply. Efforts have to be made that, without the rate of inflation rising, a larger scope be granted for changes in market prices, if we really want to enable enterprises to react autonomously on the financial pressure put on them by changing their supply. In this way, government agencies will not be forced, either, as they have been so far, to renounce their declared financial policy by relaxing the financial constraints on the enterprises.

These objectives demand that the government make a considerable progress in the planned restriction of national economic demand. Besides, new means are needed for the reconciliation of social interests. This calls for changes in the work of the government, as well as in that of the bodies for safeguarding of interests. It has to be elaborated, in which way the unfavourable effects of the price changes inflicting society are to be limited for

the social groups in seriously disadvantageous position, and in which way they are to be neutralized so that they do not hinder the achievement of all the important objectives of social policy.

Necessary economic changes and ideology

The practice of the economic mechanism functioning in Hungary since 1968 and the changes due in the institutional system of the economy as well as in regulation have given rise to several, hitherto insufficiently clarified, ideological questions. Only two of these will be mentioned, and even they only superficially: the judgement of the role of the market, and the relationship between politics and economy.

We have already mentioned the effect of the informal economic interventions on the economic units, making the statement that, though they helped to solve a great many acute problems, at the same time they hindered a *market-oriented* behaviour on the part of enterprises, and thus have a part in that shortage is still a phenomenon accompanying the Hungarian economy.

From the above described experiences it is easy to draw the conclusion, as it is done by many, that in countries where most of the means of production are state property, the introduction of regulated market conditions is apt to reduce the effect of a few particularly unfavourable factors disturbing the coordination of demand and supply, yet, in this way the shortage economy cannot be eliminated, nor customers' demands considered, and inputs saved. Those holding such views stress that the market always plays a limited role in socialism, and that is justified: moreover they play into the hands of those who query the rationality of socialism at all. And this starting-point leads to the conclusion that the decisive role of the non-market control methods is to be maintained.

To support these views, the argument is brought up that the idea of a self-regulating market is nothing else but a rehashing of Adam Smith's long "out-of-date" theory of the "invisible hand". And the modern world cannot dispense with the controlling role (or only in the complementary fields of economy) of the "invisible hand", even under capitalist conditions.

Because of the many aspects of the question, and the complexity of the phenomena, it is not easy to form an unambiguous opinion. However, we think that, even within the limited space of the present article, a stand has to be taken in the matter.

In our opinion, it is not enough to avoid the two possible extremes. It is not enough to establish, on the one hand, that not every economic problem of the world can be treated by exclusively self-controlling mechanisms and on the other hand, that no such enlightened centre and hierarchical organization exists which is able to coordinate all the economic questions without the clash of interests and free adjustment, that is, without market. The latter statement–not of full value from the point of view of solving the problem–is already a recognition of the fact that elimination of the dominating role of capitalist ownership is not a turn of such importance as it had been assumed by socialist

theoreticians. As a matter of fact, the continuous development of and changes in social needs, international relations, and numerous other factors not only make the details of management impossible to survey from a single centre, but they also hinder an efficient management on the basis of dividing tasks within a central hierarchy.

From the preceding statement the practical conclusion may be drawn that, as there is no perfect market, so there is no perfect plan either. Only better or worse combinations of self-management and centrally planned economic control and management are conceivable. Before starting from this theorem, making the next step toward practice, it will be useful to make a detour.

It has to be weighed, whether it is really justified, in modern industrial societies, to consider the market as an obsolete or peripheric category. Two things should be clear: first, in the practice of capitalist society central economic intervention and the state sector are factors of considerable importance, independent of the ideological and political requirements actually formulated. Second, autonomous economic units are functioning not on the peripheric part of economy, but everywhere outside the sector of public services of varying size, which react, independent of the size of the organization, promptly on changes in demand, and accordingly, as required by their own interests, they continuously modify their production pattern and the system of their production relationships, and organize their financing channels. The multifarious and varying business relationships between big and small enterprises and financial institutes are to be considered as market relationships, even if this market does not fulfil the conditions of perfect competition.

In the leading industrial countries the economy can be called a market economy, because the seller's activity is centred there on satisfying the customer's demand. Monopolies and oligopolies reducing the effectiveness of competition have, though, three disadvantageous consequences, which are not to be forgotten. First, sellers use advertisement and other means to influence the buyers' demand. This is bad if it can be identified with manipulation corresponding to the producers' interests. Second, monopolistic producers often do not fully utilize their capacities because, though demand at the higher prices is lower at a lower production volume, but a higher profit can be realized. Third, beside monopolistic profit, we find the lower profits of the small producers engaged in a sharper competition–which is unfavourable socially. Imperfection of competition is, however, no reason why we should not recognize the positive effects of competition disturbed by monopolistic effects, and should not make use of it in our own society. It would be especially unjustified, since we have several methods to create the conditions for competition and to moderate those hindering it.

Coming now to the relationship between *politics and economy,* it has to be seen clearly that the solution of the topical economic policy tasks involves three problems: first, management practice under changing circumstances requires broad political backing, second, transitional social tensions are to be expected in factories and enterprises, third, the task can only be solved with a wide social support.

With slow economic growth and significant changes in the economic conditions,

these problems will not lead to grave disturbances only if, relying on the favourable experience, the relationship of the Party with the masses can renew to come up to the expectations of the new situation. What is needed for such renewal? It is important that members of society be allowed to clearly articulate their direct interests in their everyday life and in the economy, and that, with the development of the system of political institutions, a solution be found to the problem that the increasing efforts of strata and groups at asserting their interests should lead to social consensus in each important question.

The development of economic management demands, therefore, a perfection of political democracy. Parliament, and the existing institutions for safeguarding of interests –among them first of all the trade unions–have to be prepared to face new tasks. Besides, organization of safeguarding the interests of a few social or partial groups so far without protection also necessitates a considerable organizational change.

The relationships between politics and economic management are, therefore, clear: economic progress is the precondition of maintaining a calm social environment. And this aim, even though it may seem to be a contradiction, can only be achieved by developing socialist democracy and thus by the articulation and assertion of partial social interests.

Reference

1. Nyers, R.–Tardos, M.: What economic development policy should we adopt? *Acta Oeconomica*, Vol. 22 (1979), Nos 1–2, pp. 11–31.

НЕОБХОДИМОСТЬ КОНСОЛИДАЦИИ И ВОЗМОЖНОСТЬ РАЗВИТИЯ

Р. НЬЕРШ – М. ТАРДОШ

Авторы анализируют период приостановки роста задолженности, начиная с 1979 г. Они считают успехом, что удалось ликвидировать тяжелую несбалансированность внешнеторгового баланса и что страна в критический период 1981–83 гг. сохранила свою платежеспособность, уменьшился дефицит госбюджета, были предприняты благоприятные меры в области снижения удельного потребления материалов и энергии, а также что меры, направленные на сохранение жизненного уровня и улучшения жизненных условий — несмотря на имеющиеся противоречия — можно считать успешными. Успехи были закреплены развитием организационной структуры экономики, в том числе развитием мелкого предпринимательства, а также расширением методов внешнеэкономической дипломатии. С другой стороны, они констатируют немало недостатков: внешнеторговое равновесие еще не стало стабильным, качество товарного снабжения не улучшается, эффекты развития мелкого предпринимательства противоречивы вследствие рестрикционной политики, усугубилась недогрузка производственных мощностей, несмотря на рост льгот и выплат из фондов общественного потребления, неудовлетворенные потребности населения не уменьшились. Все это вызвало появление также и критических политишеских течений.

На основе анализа успехов и недостатков в статье рассматриваются альтернативы экономической политики, причем отмечается, что указанными вопросами партийно-правительственные комиссии занимаются с целью разработки общих мероприятий, касающихся всей хозяйственной деятельности в целом.

В статье анализируются четыре дилеммы: следует ли сосредоточивать усилия на переход к эффективному развитию или же на поддержание стабильности; в какой политике развития имеется необходимость — на приспосабливании к условиям или на усиленной концентрации ресурсов развития; является ли задачей радикальное ограничение неформальных и эпизодических центральных вмешательств или же дальнейшее развитие системы условий регулируемого рынка, и, наконец, подчеркивается противоречие между обеспечением категорий населения, находящихся в неблагоприятном положении, и выдвижением на первый план стабильности социальной политики.

В заключение в статье рассматриваются идеологические аспекты связи между планом и рынком, а также экономикой и политикой.

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FURTHER DEVELOPMENT OF THE HUNGARIAN PRICE SYSTEM

B. CSIKÓS-NAGY

A new stage in the development of the Hungarian system of economic control is under preparation. As part of it, the price system is subjected to critical analysis and proposals are being worked out. A team headed by the author summarized its conclusions and proposals in Spring 1983. Relying on this document the article discusses the experience gained with the Hungarian price system over a quarter of a century and the major characteristic features of changes to be implemented around 1985.

Historical survey

Shifting the Hungarian economy onto a new growth path has proved to be a more complicated task than expected. In this real processes have played a role in the first place, related to the weakening of the growth potential within the CMEA to an unexpected extent and to the partial credit embargo introduced in East-West trade in 1982. The resulting constraints on growth cannot, of course, be removed by modifications in the control system. Nevertheless,

– a better adjustment, based on mutual advantages, to the requirements of the international division of labour may ease these contraints and, particularly,

– a better exploitation of our endowments may bring into play new internal growth energies.

All that is, of course, a matter of *efficient economic policy* and, as such, also the business of the system of economic control. The experience of a quarter of a century testifies to this fact. This is why in 1983 the government passed a resolution on improving the system of economic control. According to this resolution ideas have to be developed so that they can be implemented in a few years around 1985, and preparations have to be organized in a manner that the most urgent changes can be made already in 1984.

Preparation for changes in the system of economic control and their implementation *are not unusual tasks.* Hungarian economic policy has, for a quarter of a century, been characterized by the fact that

– *it adjusts,* with some time lag, to the changing external and internal conditions and, in harmony with them

– it permanently *renews* certain elements of the control system.

The whole process of the reform of the economic control system took place linked to *the development of the price system.* This will be true in the future as well. The linkage is understandable if we consider that in a commodity-producing economy

economic policy manifests itself either in price control or in some step that influences the factors of demand and supply.

Throughout the past quarter of a century price policy has had a specific task in the formation of Hungarian economic policy. Its role has been different in agriculture from that played in industry or in the tertiary branches.

In agricultural policy the changes implemented in 1957 in the trade in commodities were decisive. The turn in price policy was forced on us by the abolition of the compulsory delivery of produce and the shift to free procurement. The new systems of finances and prices developed in harmony with each other in 1957 proved to be an effective incentive from the points of view of both the socialist reorganization of agriculture and the intensive development of agriculture relying on a socialist basis. A prices policy which adjusted to the changed system of commodity trade forced the creation of a free market in fodder in 1970 and thus obstacles were removed before the development of animal husbandry as well.

Prices policy has throughout had an initiating role in *industrial policy*. But while in agriculture adjustment to the requirements of commodity production took place overnight, in industry this required more than two decades. The period between 1957–1980 was characterized by a gradual evolution of the price function. Between 1957–1967 improvements in cost plus profit pricing, between 1968–1979 the laying of foundations for the structure-regulating role of prices and, beginning with 1980, stronger assertion through adjustment to relative international prices were characteristic.

All this was not done by prices policy with satisfactory consistency which could thus be blamed for the fact that

a) structural transformation and adjustment to the market are slow,

b) owing to the maintenance of price subsidies economic power weakens again and again,

c) unjustified incomes come about in the processes of constant inflationary pressure, because of which ulterior regulation becomes necessary; and this introduces uncertainty into the economic environment.

As distinct from agriculture and industry, in the *tertiary branches* (construction, services) the role of prices could not be asserted for a long time. In these sectors, even the elementary (quantitative, organizational) conditions for price competition were missing. With the introduction of price formation through tenders in construction, the widening scope of small ventures and the lifting of price regulations in respect of a good part of innovative services it has been only in recent years that steps have been taken in order to activate the price function. This is the area in which prices policy after 1956 differs in the least from that prior to 1956.

Related to the further development of the control system new and essential changes are needed also in the price system. The Consultative Body set up next to the Economic Policy Commission of the HSWP has already surveyed questions related to the requirements of socio-economic development and to the international division of labour. We shall soon reach the stage of decision preparation, to be followed by legal regulation and a

concrete description of tasks, together with the elaboration of the related economic organization measures in order to implement in practice all that politics deems mature enough for solution.

The Consultative Body discussed the document entitled "Further development of the prices system" in May 1983. The document was prepared by a team headed by the author.* The discussion clarified the main directions in the development of the price system, although in several problems of detail further analysis is needed and solutions can emerge only from further discussion.

The main direction for the development of the *price system is determined* –similarly to 1980– *by the economic reform of 1968.* This statement holds even if otherwise we have to acknowledge that the *objective political and economic conditions are today different in many respects:* a) there is not a unified market nor can it come about, b) the external market conditions are different as regards both socialist and Western countries, c) the social and political constraints are stricter than originally assumed.

The 1968 reform demanded of prices policy that it should bring about a system of prices which would correctly guide enterprises in their economic decisions. Related to this function, three criteria were determined for price formation: Prices should.

– take into account production inputs,

– consider the value judgements of the domestic consumer and the foreign purchaser, and

– express government preferences.

The first criterion approaches the problem of price from the *aspect of production* and expresses the fact that production entailing losses cannot–as a rule–be maintained in the long run. Inputs must be recovered from prices or with the aid of budget subsidies. The second criterion approaches prices from *the side of the consumer* and expresses the natural phenomenon that prices cannot be abstracted from the utility attributed to the product in its use. This utility is regulated in the case of products participating in foreign trade by the foreign trade price. The third criterion approaches the price problem *from the aspect of the state (politics).* The state is not neutral towards market processes. It prefers certain processes while discriminating against others.

*The team worked in six groups: 1. Appraisal of the system of industrial producer prices and proposals for further development, headed by Andrea *Deák* 2. Further development of the price system in agriculture and the food industry, headed by János *Márton.* 3. Appraisal of the price system in construction, headed by József *Kádár.* 4. Prices and charges in the infrastructure, headed by Róbert *Hoch.* 5. Further development of economic calculations, headed by Edit *Jávorka.* 6. Relationship between the financial and the price systems, headed by Attila *Madarasi.*

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Supply behaviour

Let us scrutinize *production,* production inputs and even more *the system of conditions of rational enterprise behaviour* and, closely related to it, *the possibility of judging the economic efficiency of production.*

The Hungarian economy is sensitive to foreign trade. In such an economy almost every productive investment project serves either export promotion or import substitution. In such an economy exploitation of the comparative advantages of foreign trade is the basic problem of economic growth. This is why consideration of the foreign trade price seems to be perhaps the most important task in price formation. In an economy sensitive to foreign trade the objective necessity of linking the domestic with the foreign trade price derives from the fact that there is an organic relationship between economic efficiency and international competitiveness on the one hand and between equilibrium, the export potential and import substitution on the other.

It follows above all that, *owing to a relative scarcity in primary energy and industrial raw materials, the domestic price should not be independent of the import price.* But the question arises how to take into account price differences appearing on external markets between rouble and non-rouble prices. In this respect the price revision of 1980 produced the change that, as against the earlier average social input, domestic prices adjust in every case *to non-rouble prices* and the changes therein. In this respect the price of crude oil is an exception. Here, the domestic price is lower, for the time being $ 27/barrel, also because we deduct from world market prices the saving in freight charges attained by the Hungarian economy by importing crude oil and natural gas through a pipeline from the Soviet Union.

Several economists object to this shifting from the average price formed from prices in different markets to the highest (marginal) price. [1] It happened because of the following considerations: 1. the import quotas of fuels and basic materials could not be increased for some years now within the CMEA, or only for contributions to investment. In some cases the quotas are even reduced. 2. In the price system of CMEA cooperation a world market price basis is applied. The shift to a gliding price basis has accelerated the keeping up with world market price changes. 3. Fuels and basic materials can be procured from within the CMEA only at daily world market prices. 4. The price can adequately guide in economic development only if it reflects price relations characteristic of the increment of imports. 5. In the price calculations of users raw materials and primary energy have to be taken into account—as by their world market competitors—at import prices of the non-rouble market. Thus, the international valuation of domestic products expresses the valuation of domestic labour performance.

All that justifies that the domestically applied valuation method of natural resources should be maintained.

The orienting function of prices has also been improved by the fact that, beginning with 1980, the producer price of manufactures is either directly linked to world market export or import prices, or indirectly, through specific rules of the game.

But rational enterprise (supply) behaviour assumes an adequate *system of calculation* which basically differs from the traditional system of socialist economic accounting. The attributes of calculation change if this is not done for the information of central planning but serves rational enterprise decisions.

Two features of *normative cost accounting* should be stressed. One is that costs not occurring in reality, or not to the prescribed extent, also have to be accounted as costs. Among them we find costs a part of which the state withdraws as taxes from the enterprise for the purpose of forming central financing sources, as happens with the depreciation allowance and the technological development fund. Another property of normative cost accounting is the principle of adjustment to *average costs.* To put it more exactly, in traditional price formation the formula of cost plus profit relies on the principle of average cost. The cost normatives are regulated according to general conditions.

Such a system of cost accounting almost demands a *gross system of settlements with the budget.* Thus the enterprise may get into the loss danger zone even if the price exceeds marginal cost. It follows that the profit and loss account may show a loss even in cases when the budget withdraws funds from the enterprise exceeding that.

In the given situation of the enterprise economic calculation means a combination of factors of production and the pattern of production. The enterprise combines the given factors of production (or those to be acquired) and confronts them with price receipts in order to attain the greatest result. The difference between economic calculation and price calculation obtains particular importance when a considerable part of decisions should be directed at exploring to what extent and with what product it is worth better exploiting production capacities through increasing exports or the domestic production of hirtherto imported products. According to economic calculations this is advantageous as long as the additional price receipts attainable through the sale of additional output cover, in addition to the variable (proportionate) costs also a part of fixed cost–assuming that the fixed (constant) costs of the enterprise are retumed from the price receipts of products turned out with the earlier lower exploitation of capacities.

According to the prevailing prescriptions the enterprise may apply *any kind of economic calculation* in its *economic efficiency, profitability and planning computations.* But the official prescriptions relating to price calculation and price formation for various reasons restrict the differentiation of overhead and profit among the main markets (western exports, socialist exports, domestic market). Differentiation of costs and profits between products for domestic sale and for export cannot serve as a basis for applying unduly high producer prices relative to the domestic prices of the products already traded. The profitability of exports settled in currencies other than the rouble must not be improved by shifting overhead costs onto domestic sales. Therefore, e.g. the industrial firms selling abroad on own account cannot distribute costs according to the ability to bear overheads when computing the profitability of non-rouble exports.

Thus, although initiatives have been taken in order to spread economic calculation ever since 1968, it could not be organically fitted into the system of enterprise decision

preparation. This deprives the economy of important reserves that might serve to improve the foreign trade equilibrium.

Since we have maintained several elements of the calculation and financial systems prior to 1968, the starting point for the further development of the price system can only be that *enterprises should form their opinion* on whether the market price of their product or the price of related products suits them, or with production expansion of what composition the firm's results can be improved with prices attainable on the market, *not on the basis of the price calculation (price formation rules) prescribed by authorities, but on that of economic calculation.*

Rational enterprise behaviour cannot dispense with a regular comparison of its products with those of its competitors. It is justified and useful to perform this comparative analysis of important export articles both from the technical points of view (design of the product, production technology, technical and quality parameters, gross and net material consumption, the time spent on individual production operations, the degree of cooperation, size of series, etc.), and from the market aspect (delivery deadlines, scheduling of partial deliveries, replacement of parts, services, instructions for handling, technical advice, frequency of complaints, goodwill, references, freight differences, advertisement and marketing, commission fees, the customs duties and other administrative rules of the buyer country). In this manner losses can be explored in detail which arise from the higher domestic costs, or from the usually lower export prices of the Hungarian products than those of foreign products. In the knowledge of the factors of losses it becomes clear where and what should be changed, the eventual additional costs of necessary internal measures can be assessed and this can be confronted with the realistically expectable additional results attainable through more rational cost management and a more advantageous export price.

Comparative analyses of such a nature and the practical measures following it have to become organic elements in enterprise management. The practice of explaining losses derived from *poor performance, in a simplifying manner, by discriminatory measures* has to be abandoned. The improvement of international competitiveness demands enterprise behaviour closely familiar with the production and marketing method of competitors, and able to adequately exploit them.

Consumer preferences

The assertion of consumer preferences in a socialist planned economy gives rise to the most complicated problems, although one should imagine that in a socialist socio-economic system production based on needs can be realized in a more natural manner than under capitalism. The role of the consumer in price formation depends on

– the extent to which demand determines supply policy, further, on
– the possibility of price bargaining.

The economic reform of 1968 produced basic changes in the system of regulations, but it only slightly changed the institutional system of the economy and the structure of enterprise organization. The monopolistic organization of supply remained almost untouched, in fact, in conformity with the prevailing ideas of the sixties, in industry, economic reform was preceded by organizational integration.

In addition, the 1968 reform did not consistently implement the shift from a supervision-oriented vertical organization to a marketing-oriented horizontal organization. The vertical organization can, in fact, only be justified if the hypothesis of the perfection of state planning holds fast. According to it planning solves every problem on macro-level; the remaining task on the micro-level is to fulfil the plan. Experience has convinced us that this view is untenable. But a thorough analysis of the problem is still required of the kind of changes that would be justified by control through economic instruments in the institutional order, particularly in the organizational structure of enterprises.

Naturally, on the supply side, competition among products cannot be circumvented which, at the present state of technology, obtains high importance if the hands of enterprises are not bound by central material management when choosing sources of energy and the structure of materials. Given a widening range of choice of commodities competition now exists among investment and consumer goods. But this does not in itself yield satisfactory results. The role of import competition and even that among domestic enterprises has not, however, been significant to this very day. Beside import restrictions import competition is made marginal—particularly in our days—by the high import duty. Competition among enterprises has been for long restricted to those sectors where the weight of industry in cooperative ownership is significant.

All that makes it understandable that the economic policy aiming at better equilibrium after the economic reform of 1968 *could not raise the consumer to the rank held desirable on principle.* What is perhaps the most important task of the years to come regarding the control system is as follows by improving the conditions of internal competition *the institutional order has to be adjusted to a marketing-oriented organizational structure.*

In the 1968 price reform it was the bringing *about of a flexible price mechanism* that created most of the problems. Equilibrium disturbances had to be reckoned with. What had to be prevented from the outset was that a flexible price mechanism should lead to a runaway inflation. We introduced a *mixed price mechanism,* where fixed and maximum prices, upper and lower limits set for price movement, as well as free prices exist side by side. The main problem of the mixed price mechanism was to identify the strategic points which should be partially or entirely freed of the direct impact of market factors. Three hypotheses were used to lay the foundations:

1. Officially fixed prices have to be used over a wider range of consumer goods than of producer goods. In the sphere of consumption price forms were chosen in such a manner that those goods and services should have a guaranteed price on which a consumer of average income spends 50 percent of his expenditure. Projected to subsistence costs this meant a price guarantee for 70 percent of expenditure.

2. Officially fixed prices should be used more widely in cooperative agriculture than in state-owned industry. This was justified by the following:

– The macrostructure of industry is determined by the existing structure of establishments from the outset, and the process of structural transformation is regulated with a high degree of central control by the development policy outlined in the plan. As againts that, agriculture possesses the property that the structure of production can be changed over a wide range by micro-level decisions.

– The basic wages of industrial workers are guaranteed by the state, while the incomes of agricultural workers are regulated by prices and taxes corrected by budget subsidies.

3. In the state sector of the economy, apart from basic infrastructural services, the impact of the market value judgement has to be ensured to maximum extent first of all in the materials processing. The strategic points of officially fixed prices were therefore identified in the range of energy and basic materials. At the same time, we set out from the assumption that the prices formed in industrial cooperation are regulated backwards by the price of the end product.

While keeping the main principles in view, between 1968–1983 the range of goods and services traded at free prices gradually expanded. The *ratios of price forms* are shown in *Table 1.*

Table 1

The ratios of price forms in sales, early 1983
(percent)

	Official	Free
Industry (incl. food processing)	20	80*
Construction	75	25
Agriculture	63	37
Transport	77	23
Other	15	85
Total material production	30	70
Material production excl. industry	58	42
Personal comsumption	43	57

*Of which 50 percentage points are covered by competitive pricing.

Over the next few years a widening of the scope of free prices is contemplated in construction and in personal consumption. In construction this may attain 100 percent, in personal consumption 70 percent. It has to be added, however, that the stabilization mechanisms (unfair profit, obligation to announces price rises), will constrain the enterprise price bargaining within limits, as they have done in the past.

Political and social preferences

The scope of political and social preferences and the mode of asserting them is one of the most debated questions of price policy.

Between 1946–1951 these were mostly restricted to public services. They were complemented–within a relatively narrow scope–by preferences applied to industrial articles, mainly those related to bringing up children. All these were so-called *direct* preferences built into the consumer price system. As against them, the coming about of new consumer preferences between 1952–1968 was rather a consequence of the freezing of consumer prices. The so-called *indirect* preferences came about depending on changes in the producer (procurement) prices. Their wide assertion was a consequence of the rising level of producer prices, as a result of which several consumer prices involved losses.

Because of the large deviation of consumer prices from value the 1968 economic reform could not make it its immediate aim to put consumer prices onto a value basis. The general opinion was that consumer prices proportionate to producer prices could be introduced over a period of 10–15 years. But the transition to input-proportionate consumer prices has never been taken to mean that budget price subsidies should be completely eliminated.

In keeping with the long-term directives of the development of the price system the following should be ranked among *consumer price preferences for social reasons:*

– Products and services serving basic cultural, health and social purposes. In this sphere preferences may even expand or tend towards becoming free, depending on the economic situation.

– The price of basic (staple) foodstuffs may remain preferred (free of tax) even in the long term.

– The charges for the most important–not substitutable–services, housing rents, passenger transport charges and fees for communal (public) services may be such that changes in input relations must be adjusted to periodically, but they may be lower than set level of socially necessary inputs even in the long run.

– Price deflections will be maintained the purpose of which is partly to secure government revenues, partly *to restrict the rate of growth of consumption.* Prices will be set higher than the level justified by inputs for some articles such as alcoholic beverages and tobacco in the future as well. The same holds true for luxury articles and also serves to restrict the too fast expansion of motoring.

In some cases the application of prices deflected upwards from input may serve also the redistribution of incomes, if such prices are applied to articles purchased mainly by higher income groups, or by foreign visitors.

Even a deliberate, lasting preference *does not amount to freezing prices.* Changes in inputs may make it necessary that consumer prices keep up. It is still a task waiting solution to outline more closely where it is expedient to keep up with changes in inputs as an ongoing process, where an approximation is sufficient, and which are the areas

where separation of the movements of the two kinds of prices can be maintained according to the prevailing practice.

According to computations performed at the turn of 1978/79 *abolishing certain budget price subsidies* would raise the consumer price level by almost 30 percent. These computations were then related to the preparation of the price changes implemented on 23rd July, 1979. This measure was an important step towards introducing value-proportionate consumer prices and involved a 9 percent rise in the consumer price level. Other measures have been taken since then.

In the course of said computations performed at the turn of 1978/79 the subsidized products were divided into two groups because of the export surplus necessary on account of liquidity problems of the economy and in order to preserve international solvency. The first included those which affect the Hungarian citizens, as e.g. housing rents or reduced transport charges, as well as services which are mainly used by Hungarian citizens. Those which are more closely linked to foreign trade or to invisible exports were placed in the second group. In this group electric energy, fuels, chemicals and foodstuffs are of major importance.

This grouping is important from the viewpoint of the order of abolishing the budget subsidies. At any rate, between 1984–1987 significant further steps have to be taken in the interest of shifting to value-proportionate prices, although it is hardly likely that a complete solution of the problem can be made the task of these years.

The agricultural price system

In the past quarter of a century *Hungarian agricultural price policy* has relied on ideas (and will probably continue to rely on them in the future as well), that had been formulated after the abolition of the compulsory delivery of agricultural produce and then at the time of shifting to the system of free procurement and the socialist reorganization of agriculture.*At times concepts such as the world market price [2], the agro-industrial price parity [3, 4, 5] and the fitting of budget subsidies into the price [6, 7] also emerge.

World market prices ceased to regulate the European agricultural structure decades ago. It was not fortuitous that after the Second World War the European Common Market emerged with the introduction of a Common Agricultural Policy, the introduction of regional prices significantly exceeding the world market price level and essentially deviating from them in respect of relative prices.

The *agricultural price scissors* lost much of their edge with the coming about of worker-peasant *income parity*. Under such conditions price parity involved, as a matter of

*As a background of the document: "Az árrendszer továbbfejlesztése" (Further development of the price system) the Research Institute for Agricultural economics surveyed views on the agricultural price system and listed 46 works discussing agricultural problems.

course, the requirement that agriculture should be taxed proportionately to industry, the procurement prices should be raised expressly in order to improve the ability to pay tax. This, however, would amount to a radical transformation of traditional industry-centred taxation, invoking concomitant social tensions.

Those emphasizing that budget *subsidies should be included in prices* sometimes forget that there are specific problems that can hardly be solved by prices. Thus e.g. in branches with long production cycles extra-price subsidies have generally proved to be efficient incentives for maintaining and developing production. In cooperatives working under unfavourable natural conditions it is only specific support than can prevent the flight of manpower.

Discussions on concepts should be correctly interpreted. In agriculture and food processing about 30 percent of the value produced, and a large part of the increment, *are exported.* Therefore producers should be guided by prices to the possible maximum extent concerning the absorptive capacity of the world market for agricultural products and changing prices at which there is a possibility to sell the products. Efforts should also be made *not to deform the cost structure* by extra-price subsidies, that is, it should be ensured that our international competitiveness and its limits can always be properly estimated.

Owing to such and similar reasons, our agricultural price system will change over the next few years, much as in the past quarter of a century, by ongoing adjustments. Hungarian price policy wishes to promote the development and international adjustment ability of this sector which will remain important for our country in the future as well.

In discussions about the agricultural price system two problems have come to the fore in our days. One is the profitability of the main and the complementary production lines, the other the relationship between the procurement price and consumer prices.

In 1982 33 percent of the value of gross output was derived from complementary activities in the wake of the free development of industrial activity in the agricultural cooperatives. But a production tax is levied on such activities, thus only about a quarter of the profit derives from complementary activities. It is usually mentioned how unfavourable the economic position of the cooperative sector would be if it did not carry out industrial activities. This gave rise to the demand that the procurement prices of agricultural products should be set exclusively according to the cost-profit relations of the main activity. But we must not move in this direction. A liberalized handling of the complementary activity relies precisely on the consideration that it should secure complementary income first of all in those cooperatives where, on account of adverse natural conditions, the income level would be low. It is also as a result of the activation of complementary activities that an improvement has to be attained in the international competitiveness of agriculture and the food processing industry.

A more organic link between the procurement price of agricultural products and the consumer price of foodstuffs seems important since a *market value judgement* becomes stronger in the food economy. As in industry, we have to abandon an approach in agriculture as well, which believes that it is possible to make decisions on the

production pattern and development merely by using material and technical criteria, expecting that the financial burdens can be taken by the budget independently of the fact whether the product can be sold on the market at an appropriate price.

The industrial price system

The attention of most Hungarian economists is centred on industrial price policy, more precisely *on competitive price formation.* There is much criticism, but little that is new and useful. More precisely: criticism played an important role in the discussions preparing the decision, but a good part of it could have been written even before 1980.

Let us start with the fact that in 1979 the majority opinion was that the conditions of shifting from a cost plus to a competitive price system were absent. [8, 9]. Yet the bulk of criticism since 1980 does not object to the competitive price system but to its stimulation, and to the exceptions. A realistic evaluation of the competitive price system is rendered difficult by the fact that sometimes the rules of the game are rather wilfully interpreted the deviations from which should be interpreted as exceptions. The opinion was expressed that the exceptions amounted to a return in price formation to the formula of cost plus normative profit [10, 11, 12, 13]. Everyday experience will however convince everyone that a compromise in the direction of cost is of a transitional nature different from price formation based on the principle of cost plus. Who could deny the change that occurred in the evaluation of enterprise work which is expressed also in the fact that the transitory exceptions–which are not, contrary to general belief, of a large number–are made with mutual commitments. The gap which was created by the cost plus profit price system between the reasoning of enterprises and the dependency of the Hungarian economy on the world market is being eliminated.

In the debates of 1979, and later again and again, it was said that in domestic price formation *the import price should be the main regulator instead of the export price* [14, 15]. Keeping up with import price cannot be done, because:

– We only import a few ten thousand of the several million kinds of products produced. Thus we would not make a real but computed external market prices the centre of domestic prices which would burden price formation with the insoluble problem of indentifying both finished and intermediate products.

– It would expand the keeping up with prices (relative prices) in the relation between domestic and foreign trade prices to products in addition to natural resources: thus it would paralyze the natural function of prices which decrees that in the range of domestically sold products price should reflect domestic demand and supply.

It should be emphasized that with the 1980 price revision we intended to provide the basis for internationally justifiable standards of performance. True, the price system fulfils this function defectively partly because of rigid rules of price formation, and partly because of the exceptions to be made also on this account. But we cannot attain the formation of a more up-to-date price system by exchanging the present methods of price formation for new kinds of simulation methods.

The document drawn up on the further development of the price system puts it as follows: The concept of a domestic competitive price influenced by international trade prices relies on the assumption that we can attain long-term economic objectives (the raising of living standards, and the economic growth necessary for this), only if the price is built into the regulatory system by asserting real functions (guidance, stimulation, equilibrium). In the absence of sufficiently powerful domestic competition prices can only fulfil such functions if everywhere, where this is possible, they shape within the limits of international (foreign trade) prices. As a result the domestic price will suitably display the actual internationally acknowledged efficiency standards, permitting comparisons, and mediating the structure-shaping effect of effective demand.

By putting industrial prices under the control of international competitive prices the price system has taken upon itself a function that can be carried out to a satisfactory extent only under the conditions of developed market relations, and full internal and external economic competition. In the absence of these expectations can be met only by complicated prescriptions, by circumscribing the rules of the game of price formation, adjusting to foreign trade prices in a simulation model. We knew already at the time of its introduction that the simulation procedure can only be of a transitory nature, since every regulation not supported by real conditions soon shows more and more of its disadvantageous features.

All that makes it obvious that the way of further development can only lead through the improvement of market relations. Therefore, an economic policy organically belongs to this concept, which strengthens the conditions of internal competition in both the competitive and the non-competitive areas, including the enhancing of import competition indispensable in the competitive field.

The price system of the building industry

Basic changes have to be attained in the *price policy regarding investment*. A part of the accumulated social product is directly engaged in material production, another part increases the capital stock of the non-productive branches. It is on this basis that we usually distinguish productive from non-productive investment.

With non-productive investments (schools, hospitals etc.) the value of the project can be derived only from actual inputs, since the product does not become a commodity. It is generally the system of tenders which acts as an effective method to ensure that actual inputs conform to what is socially necessary.

The situation is different with productive investment projects since they become commodities. But they are particular commodities. Their use value lies in the fact that they can be used for commodity production. It follows, however, that socially necessary input can only be determined in an indirect manner, through the cost and price relations of the products turned out as commodities by the project. If the input in a commodity produced with the new capacity is greater than with the majority of already operating capacities, the investment input, or part of it, is not justified, it does not become part of the value.

This organic *link between investment and commodity production* mostly shows only if a reconstruction is carried out in an operating establishment or if the organizer of

the investment is at the same time responsible for production. But, looking back over a long period, it has been established practice that the two have become separated precisely in the case of the most important investment projects. It is characteristic mainly of these that the time of completion is longer, costs are higher and the result smaller than planned. Since the lack of sensitivity to time and costs is particularly significant if the designing and execution, investment and production functions are sharply separated, investment price policy can be improved only in harmony *with the transformation of the instutitional order.*

In modernizing the institutional order the greatest emphasis has to be placed on the further development of the organizational system of the building industry. A rearrangement of the organizational structure to conform to needs is just getting off the ground. In building related to maintenance complex enterprises have been founded; several affiliates and a large number of small ventures have come about. Modernization of the organizational system and internal operation mechanism of the construction and designing enterprises has to be continued and the number of small and medium enterprises must be increased.

The price system of constructions has to be transformed parallel to these measures. Price regulations based on Construction Cost Calculation Norms have hardly changed since the fifties and they do not respond to the requirements of industrialization and technological change that took place, nor to the properties of a construction mostly of an assembly nature. It is expedient to develop the price system of constructions further in the direction that prices should be determined by the building organizations themselves, in agreement with the firms commissioning the building. *An enterprising (competitive) price system* should be set as a long-term objective [16, 17, 18, 19, 20]. If adequate conditions are secured, competition between entrepreneurs will create price relations stimulating the raising of efficiency, and activate the supply behaviour of enterpreneurs. The income positions of entrepreneurs and prices express the actual efficiency relations, mediate the structure-shaping impact of demand and, in general, promote the coordination of demand with supply.

Closing remarks

There have always been and there still are economic units that have been shown –in a peculiar way– *to be non-viable* in any kind of possible price revision, and yet we secure their operation by *budget subsidies.* On the basis of the experience of several decades it is worth summing up a few *conclusions* concerning them. 1. It seems that in an economy where the structure of production and its commodity pattern did not come about under direct market impacts and commodity automatism, where the demand lacks reality, that the shaping of structure should be coped with in a normative financial system, without exceptions. 2. The structure-orienting role of price has diminished on a world scale in the extremely complicated political and economic structure of our times, and no country can behave indifferently towards strengthening protectionism.

Nevertheless, *more resolute steps* than at present can be taken *towards developing an efficient structure.* The risk of social conflicts has to be taken in their interest.

The price system has to be judged as a part of the process in economic policy that started in 1979 following a resolution of the CC of the HSWP, passed in October, 1978 and which is continually enriched by ever newer elements. In this process the development concept of the price system and the price mechanism is 1. progression towards competitive prices in production, and 2. harmonization of the living standards policy with a rational consumption pattern.

We have reached a point in the development of our price system where every further step *demands increased caution* from the viewpoint of the ability to centrally control the price level. In 1968 we shifted from the system of official prices to the mixed price mechanism so that we can relatively safely control the price level. This can be attributed to the *stabilization mechanisms* built into the price system. Among them the obligation to make calculations, including the centrally regulated order of cost accounting has distinguished importance, as well as regulations related to unfair profit, and the obligation to announce intended price rises in advance. All that is complemented in manufacturing by the adjustment of the domestic price level and the average enterprise profit to changes in export price levels and export profits.

Thus, from the points of view of both the formation of an efficient production structure and the evolution of a marketing policy to serve international competitiveness it seems that the underpinning of *rational economic calculation is the most important and most urgent task.* For this, however, a normative cost accounting system has to be abandoned which, for the time being, remains the most important information base of price control.

International experience warns us that every major step towards a market price automatism, not satisfactorily supported by equilibrium and market forms, eliminates rational elements by introducing a new irrational element through the price-wage spiral, as a result of which anarchistic phenomena may appear as well. Therefore, now and in the future, we have to work out the tactics of a series of steps linked to safeguards and proceed along a carefully thought out line of progress. It is on this basis that we have to set the way for improving the competitive price system.

The initial steps will at any rate be taken already in 1984. In competitive price formation we shall abolish of the double constraint on price level and profitability the one relating to the latter, wherever the measurement of the price level has been adequately solved and the market situation is also satisfactory. But it is also contemplated to create a club of enterprises operating under satisfactory conditions where, with a larger enterprise autonomy encompassing also wider spheres of management, and by inserting an import price constraint, a market price system might be implemented.

The extensive spreading of economic calculation is rendered difficult today also by the fact that the demand for information on the part of the central authorities is immense and its satisfaction forces, as it were, the enterprises into maintaining a system of accounting and calculation beside which there remains no power and inclination for introducing a radically different system. Thus the basic problem is how to provide foundations for the central demand for information ensuring that its attributes should be

regulated by the rational guidance of enterprises. In other words the whole system of economic accounting and bookkeeping should be harmonized with the principle of economic calculation.

References

1. Hoch, R.: A világpiaci árak és az árcentrum (World market prices and the price centre). *Közgazdasági Szemle* 1980. 10.
2. Varga, Gy.: A piacra termelő mezőgazdaság (Commodity producting agriculture). *Közgazdasági Szemle* 1982. 2.
3. Burger–Gimes, A.: *Az élelmiszertermelés gazdaságtana* (The economics of food production). Közgazdasági és Jogi Könyvkiadó, Budapest 1980.
4. Németi L.: A nettó termelés alakulása (The shaping of net output). *Figyelő* 26 March 1980.
5. Márton, J.: A versenyképes élelmiszertermelés feltételeinek továbbfejlesztése (Further development of the conditions of competitive food production). *Gazdálkodás* 1981. 2.
6. Kostály, R.: *Támogatás, adók, keresetszabályozás a mezőgazdaságban* (Subsidies, taxes and the regulation of earnings in agriculture). Közgazdasági és Jogi Könyvkiadó, Budapest 1983.
7. Molnár I.: Miért nem nő a mezőgazdaság nemzeti jövedelemhez való hozzájárulása? (Why does not the contribution of agriculture to national income grow?) *Közgazdasági Szemle* 1982. 2.
8. Ábel, I.: Külkereskedelmi árakhoz igazodó árképzés (Price formation adjusted to foreign trade prices). *Közgazdasági Szemle* 1980. 7–8.
9. Zelkó, L.: A versenyárrendszer elméleti és gyakorlati problémáihoz (On the theoretical and practical problems of the competitive price system). *Közgazdasági Szemle* 1981. 7–8.
10. Antal, L.: Thoughts on the further development of the Hungarian mechanism. *Acta Oeconomica* Vol. 29, Nos. 3–4, pp. 199–223, 1982.
11. Forgách, T. K.: Export és importárak ütközése (Conflict of export and import prices). *Figyelő* 30 December 1981.
12. Kornai, J.: Comments on the present state and the prospects of the Hungarian economic reform. *Journal of Comparative Economics* 1983. 7.pp. 225–252.
13. Székffy, K.: Bürokratikus és piaci koordináció (Bureaucratic and market coordination) *Figyelő* 28 April 1983.
14. Somfai, G.: Versenyárrendszerünk gyakorlati problémái (Practical problems of the Hungarian competitive price system). *Közgazdasági Szemle* 1982. 2.
15. Zala, J.: Gazdaságirányításunk konzisztens továbbfejlesztése (The consistent development of the system of economic control). *Közgazdasági Szemle* 1982. 7–8.
16. Puhr, L.: Vállalkozók és technológiák versenyeztetése (Making entrepreneurs and technologies compete). *Figyelő* 13 January 1982.
17. Puhr, L.: Lesz-e verseny az építőiparban? (Will there be competition in the construction industry?) *Figyelő* 2 September 1982.
18. Puhr, L.: Gondolatok a vállalkozói verseny szabályozásához (Ideas on regulating the competition among entrepreneurs). *Pénzügyi Szemle* 1983. 4.
19. Radnótzi, L., Hirschler–Csikós-Nagy, K.: *A beruházás mint vállalkozás* (Investment as an enterprise). Közgazdasági és Jogi Könyvkiadó, Budapest 1982.
20. Vissi, F.: Az árrendszer szerepe a gazdasági vállalkozásban (The role of the price system in economic enterprise). *Gazdaság* 1980. 3.

ДАЛЬНЕЙШЕЕ РАЗВИТИЕ СИСТЕМЫ ЦЕН В ВЕНГРИИ

Б. ЧИКОШ-НАДЬ

В настоящее время в Венгрии ведется подготовка нового этапа в развитии системы народнохозяйственного управления. В рамках этой работы ведется критическая оценка действующей системы цен и разработка новых предложений. Группа экспертов, которой руководил автор статьи, весной 1983 г. письменно изложила свои выводы и предложения. На основе этого документа в статье рассматривается опыт функционирования венгерской системы цен за минувшую четверть века и основные особенности изменений, которые предполагается ввести около 1985 года.

Основную линию развития системы цен определяют принципы реформы 1968 г., хотя сегодня объективные политические и экономические условия во многом иные. Цель реформы 1968 г. заключалась в создании такой системы цен, которая правильно ориентировала бы предприятия в принятии хозяйственных решений. Для этого система должна удовлетворить трем критериям: а) учитывать издержки производства, б) отражать оценки отечественных потребителей и покупателей за рубежом, в) отражать политические и социальные предпочтения.

Из зависимости венгерской экономики от внешней торговли следует, что важнейшим из этих критериев является учет внешнеторговой цены, увязывание внутренних и внешних цен. Введенная в 1980 г. т. н. система конкурентных цен хотела достичь этой цели по существу лишь стимуляцией соотношений цен внешнего рынка с помощью жестких ведомственных правил ценообразования, что естественно, привело к разнообразно мотивируемым льготам и исключениям. Поставив цены на промышленную продукцию под контроль цен международного рынка венгерская система цен должна отвечать таким требованиям, которым можно удовлетворить в удовлетворительной степени лишь при наличии развитых рыночных отношений, подлинной внутренней и внешней экономической конкуренции. Поэтому очевидно, что путь дальнейшего развития может вести лишь через активизацию рыночных отношений. С этой концепцией органически связана такая экономическая политика, которая в равной степени укрепляет условия внутренней конкуренции как в компетитивной, так и в некомпетитивной областях венгерской экономики, включая оживление необходимой в компетитивной области конкуренции со стороны импортных товаров.

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SMALL ENTERPRISES IN HUNGARY – MYTH AND REALITY

T. LAKY

Beside the *individual* producers of goods and services–like the artisans, the household-plot farms in agriculture, the lease and contractual operation of commercial and catering units–as from January 1st 1982 small economic units may be established in Hungary also in the form of *partnership*. The article analyzes the identities of and differences between these organizations called "small enterprise", the ratio of the organizations and their membership, and the socio-economic factors restricting their economic role.

The statutes providing for the setting-up of small business units functioning in the form of *company (partnership)* which private enterpreneurs may form came into force in Hungary on January 1st 1982. A new term was thus introduced and the comprehensive name used for the several possible forms is *small enterprise.*

Types of small enterprise

Forms of individual enterprise did exist in postwar Hungary also earlier. The traditional artisanry is the most common one. Now about 100 to 110 thousand private artisans are active mainly in the sphere of services and also produce small volumes of goods expanding the range of choice (shoes, clothes, leather goods, chemicals, plastic products, etc.). The so-called household-plot farming done by workers of large agricultural farms (cooperative and state farms) is significant: these small farms produce a considerable share of the meat, poultry, fruit and vegetable output. It is established practice in home trade to let small shops and small restaurants by contract or lease for private running.

Two years ago the *partnerships,* i.e. small enterprises, were added to the chances of individual business. They may pursue a broad range of business activities. (They are only disqualified by law from a few spheres of activity such as mining, insurance, banking, real-estate agency, foreign trading.)

Business partnerships may organize themselves in several forms, the following being the most important ones:

Civil Law Partnership (Hungarian abbreviation: PJT) Although statutorily this form had existed for a long time, it was restored to life by the new regulation. Its members must be not less than 2, the maximum is not specified. Also a legal entity may be a member. Its setting-up is contingent upon financial contribution by members, without it only a person whose professsional knowledge is required for the given activity is entitled

to membership. The contribution of property made in money and in kind suitable for use is transferred into collective ownership, i.e., for collective use. The partnership also may employ non-members. The wealth of the partenrship and the profit produced by its activity are disposed of by the members: they may divide or invest it by autonomous decision. A 40 percent tax is levied on the profit originating from the functioning of the partnership (except the following, each liable to 3 percent tax: those having concluded contract to run enterprise sections, tenants of commercial or catering shops of state enterprises, and partnerships of private retailers); members will pay tax in proportion to their individual incomes. Loss or bankruptcy of the partnership is a personal risk of the members.

Business Partnership (Hungarian abbreviation: GMK) The most important differences between the PJT and the GMK are the following: only natural persons may be members of the GMK and membership is limited to not more than 30 persons. Personal involvement in work is compulsory. A GMK may not pursue commercial activity. The tax payable by the partnership is only 3 percent.

Enterprise Business Partnership (Hungarian abbreviation: VGMK). It is actually the same as a GMK with the only difference that its membership is limited to the workers or retired workers of a given business organization (enterprise, cooperative, budgetary organization). A preliminary approval of the enterprise leader (manager) is required for its setting-up. The VGMK may not engage employees. The VGMK pays a charge to the enterprise for the use of means and equipment lent by the enterprise. The financial liability of VGMK members is limited to the financial contribution to and incomes earned in the partnership.

Specialized team of industrial/service cooperative: this is an organization working in the framework of the cooperative, with specified independence of self-management and business activity and with independent economic accounting. Its setting-up requires not less than 5 persons but there is no ceiling on membership. The specialized team is not a department of the cooperative and their relations are laid down in bilateral agreement. The parent cooperative, however, is responsible for the activities of the team and it will be responsible with its total wealth for the losses if any. (For this reason the autonomy of functioning and the scope of accepting liability of the specialized team are also rather limited.)

ÁFÉSZ specialized team. In principle it is the same as the specialized team of the industrial service cooperative but this form is attached to the agricultural consumer and sales cooperatives (ÁFÉSZ). It is set up when its activity is not agricultural in nature; in this case the taxation of the team corresponds to that of the dominant industrial or service activity, that is, the same 3 percent as of the others.

Both colloquially and statistically, the *small-size* state and cooperative units like small enterprises, affiliates and small cooperatives are classified together with the afore-said small ventures working in the form of partnership. They, too, were formed by force of the statutes of January 1st 1982. Howerver, their setting-up and principles of functioning do not differ from the earlier rules concerning organizations set up by the state or by cooperatives, except that they may keep simpler accounts and enjoy some facilities as regards the rules of management.

Although the two years of functioning of small enterprises are tempting for evaluation, this paper has not been written with the intent of casting an account. All the more as from the nearly a dozen of forms only two will be treated in detail: the business partnership (GMK) regarded a private enterprise and the enterprise business partnership (VGMK) functioning within the economic organizations of the state and cooperative sectors. Although these two forms amount to almost 90 percent of the new small organizations working in partnership form, I would not dare to venture a comprehensive assessment of small enterprises because I have found that the most important and still valid characteristic of these two years is the extraordinary changeability of phenomenon. It is impossible to foresee the direction of the trends of the various processes even for a span of one or two months. (For example that the number of the civil law partnerships that were started as the most popular form of small enterprise is below 200 and that practically exclusively graduated persons of the liberal professions are interested in it –or that after half a year of hesitation the number of VGMKs abruptly increased.) Therefore it cannot be estimated either what consequences will intensify in one month or two: the desirable or the undesirable ones? As it usually happens with new trends, once again there are too many yet unseen circumstances that affect things (eg. the "receptivity" of the economy, the trend in large-enterprise interests, changes in the equilibrium between purchasing power and available commodities, the degree of differentiation of personal incomes, etc.) each of which may cause different public atmosphere, strengthen different circles and entail different economic policy measures. All the above demand enormous precaution even in the handling of available facts. Therefore I will try to present only a few, apparently more lasting trends in the socio-economic role of the said two forms of small enterprise, as much as facts now permit. I will try to be as factual as possible, hoping that mere facts will answer a large number of questions and doubts by themselves and eliminate a few myths fabricated out of arguments of enthusiasm or anxiety that envelop small enterprises in Hungary today.

The anticipation

Although the practically uninformed public opinion was not quite aware of the meaning of names put into circulation (and it is probably still not quite aware, although news about them have been poured by the media for the last two years), the preparatory apparatuses and policy-makers expected that by setting up small business units to be run in new ways and in the form of partnerships a substantial step would be made toward launching several kinds of desirable changes in the functioning of the economy.

As far as it can be summarized on the basis of the different proposals submitted and of the arguments of informative and preparatory lectures held to collaborators of the government and party apparatus, the economic policy considered the small and flexible units capable of prompt response to any demand primarily as a *means* of improving the standard of living. It was assumed that the said units would be capable of and ready to significantly increase the range of choice of consumer goods, satisfy many sorts of demand for services, as well as to organize such activities in the spheres of both production and consumption which the traditional organizations are unable to carry out.

This way, by easing the shortages existing in the most different fields of the economy and showing the most different forms (ranging from services for the population to labour shortage suffered by big enterprises) the troubles of the economy could be diminished and the living conditions of the people could be improved. It was primarily precisely this socio-economic objective that justified the calling into being of the small enterprises.

At the same time the existence of the small-size units organically fitted into the envisaged structural transformation of the industry and it was hoped to gradually establish a network of small and medium-size establishments to complement and fit into the activities of big enterprises as a "background" required for the rational production and flexible management of the powerfully centralized socialist industry.

The small organizations were also hoped to become the means of providing new jobs without burdening the state budget and to thus help solve employment problems which different strata (e.g. new graduates in some professions and those with secondary school leaving certificate who do not go to higher education) suffered from and which became chronic in some areas of the country and in a number of counties.

Though with a certain ambiguity, expectations were also formulated that part of the wealth or income of the population would be rechannelled into production, instead of being spent on sometimes wasteful consumption.*

It has become slowly discernible from the number, activities and functional characteristics of the different small enterprise forms set up through two years that although something was started, it was in many respects different from what had been presumed (whether this is good or bad is hard to state as yet) and achievements were very modest.

Figures are changeable and by now there must have emerged new small organizations in each form and a few dozens must have ceased to exist. Let us nevertheless see the latest available summary data to get a general idea.

The following reference figures are given for appreciating the order of magnitude: the number of members working in the more than ten thousand small units represents less than 2 percent of employees in the national economy, that is, 98 percent of those employed do not participate in small ventures. Also the majority of those belonging to the two percent have kept their jobs with the original employers so that they spend their leisure time in the small enterprise.

This should be sufficient to dispel one of the most general myths of contentedness ("this is a country of enterprise") and to relieve the most general worries of two years ago ("the small enterprises would drain the workforce from big enterprises").

Irrespective of their number, the forms of small enterprise can nevertheless play an important role in the life of the economy. However, in order to form an idea about their actual socio-economic role as well as to confront new myths with reality, we must take a closer look at the different forms classified in one family by the collective term "small enterprise" but practically showing very few kindred features. It is one of the sources of the, mostly erroneous, ideas about the small enterprises to assume common characteristics whereas differences are more predominant in many respects.

*This idea has been widely reiterated since the paper of A. *Hegedüs* and M. *Márkus* published in Hungarian in 1978 [1] See also e.g. [2], [3].

Table 1
Number of small enterprises and their members in August 31, 1983

Form	Units		Membership	
Partnerships	Number	Percent	Number	Percent
PJT (civil law partnership)	188	1	1 035	1
PJT, managing given sections of enterprises under *contract*	10		31	
PJT, managing commercial or catering shop of state company by *lease*	172	1	301	
PJT, keeping retail shops	229	2	481	
GMK (business partnership)	4 184	31	24 186	20
VGMK (enterprise business partnership)	7 533	56	75 271	61
Specialized team of industrial/service cooperative	972	7	21 611	18
ÁFÉSZ specialized team	229	2	481	
Total	13 517	100	124 397	100
Small establishments				
Small companies	180			
Affiliaties	83*			
Small cooperatives	204			

*59 of this number also function in the form of small company.

Similarities and dissimilarities

Before indulging in the peculiarities of the business partnerships and enterprise business partnerships (GMK and VGMK), I attempt to give a summary below of the general and common characteristics that are, at least till now, typical of every form.

I consider the following to be essential *similarities:* a) Each form appears to be suitable for achieving the basic objective, i.e., for easing service and commodity supply shortages, diminishing the anomalies of the economy and thus improving the living circumstances of the population. b) Their flexible adaptivity adjusted to demand is due to their small size; all of the new business units functioning in the new form are small.* The presence of relatively small-size business units is indispensable in the economy: by their dimensions they represent an essentially new and the most acutely missing form in the organizational system of the economy and especially of the industry. c) Their setting-up and functioning is legal and regulated by law. This important common parameter

*At least relatively. As it was shown in the presentation of the different forms, the staff is statutorily limited only for the GMK and VGMK. The staff can amount to any number, even one thousand persons, in the other forms. Also about the size of the small enterprise the statute merely states that "as a rule, its staff will be smaller than of enterprises of similar activities". The same is valid for the small cooperatives.

demarcates those working in the new forms from the still greater camp of illegal, unlicensed and untaxed people performing similar activities whose lasting viability is due to chronic shortages. d) The functioning of new forms is based mostly on the use of *leisure time.* In about every form (except affiliates, small companies and, partly, small cooperatives) the participants work in the "small venture" after having done their daily work in their full-time jobs. This significant extension of working time in the hope of extra income, which used to be typical mainly in agricultural production and in the building industry, has become a way of living for members of further groups of the population. Using part of leisure time as working time is mutually attractive for those profiting from their knowledge in extra work as well as for those demanding that knowledge and working time. On the other hand it is obvious that the transformation of leisure into working time is an employee behaviour and not that of an entrepreneur, i.e., a simple carrying on of the habitual strategy of living and way of life.

I find that two of the *dissimilarities* of these enterprise forms are essential: a) It is probably the most important point that from the new forms only the PJT and the GMK can be considered private enterprise while every other form is a unit belonging to the state or the cooperative sector. That is, from the total of the organizations statistically regarded as uniform, one-third are private companies and about 20 percent of the membership belong to them.* The great majority of organizations and membership act as part of the state and cooperative sectors with corresponding ownership relations; except in small cooperatives, members do not invest capital into the organization and do not own the means of production. b) Differences are most considerable according to the extent to which a given form qualifies an enterprise. When the notion, in accordance with classical specifications,** implies autonomy of organization (independence from direct state control and from other business organizations, a criterion which I find to be a particularly important mark of distinction; the pursuing of profitable business activities, that is, a choice between business acts depending on profit (in the broad sense); the risk run in the hope of profit (the loss of personal investments made and occasionally of personal wealth held and income earned by the parties in the enterprise); furthermore, their freedom of decision on the profit (whether to invest or use it); moreover, their freedom of decision on the whole enterprise (whether to keep it running or to wind it up); then the forms named "small enterprises" can be classified in at least three major categories: enterprises, quasi-enterprises and non-enterprises. As a methodical analysis of the existence or lack of the different criteria of enterprise cannot be given here, I will simply summarize the conclusion. Only the main *missing* criteria will be referred to in stating the differences.

Enterprises are, in principle –in the sense of undertaking– within the bounds of statutes, the PJT, the GMK and the small cooperative where the criteria of enterprise are present.

*T. *Sárközy* purports [4] that "from the organizational point of view it must be endorsed that, contrary to the original economic-political hypothesis, the majority of small enterprises have been formed actually on the ground of public ownership." *Sárközy* namely assumes that "most of the small enterprises develop integrated in the internal mechanism of socialist enterprises. . . Thereby a new way has been opened for internal enterprise organization."

**The most commonly used definition concerning modern enterprises is the one of *Schumpeter* [5] who depended on Max *Weber* in his fundamental statements. See e.g. [6], [7].

Quasi-enterprises are the small enterprises having only partial autonomy of organization; they are set up by the transfer of equipment owned by the state, their managers are appointed by senior officers and workers are paid their wages irrespective of the result of operation, etc. According to the notion used by me, the production organization subordinated to economic control organs or to other business organizations with respect to organizational and business activities can not be considered enterprises or only inasmuch as their given status of dependence allows business activities "on basis of market opportunities and accounts" (M. Weber), i.e., the option of acting as indicated by expectable profitability.

Non-enterprises are the affiliates (which are actually the parent enterprise's "enterprise" as the parent enterprise controls the affiliate's equipment and profit, exercises employer's rights over managers and workers etc.); the relations of lease or contracting (since although the tenant and the contractor are entrepreneurs in their person, yet do not dispose of the equipment of the proprietor organization, from the organizational point of view the unit is not autonomous, the investment of the tenant is of the nature of guaranty and not of capital, etc.); the VGMK, the specialized team of industrial/service cooperative (organizationally, it is not autonomous but can be formed from active and retired workers of the enterprise and its formation requires enterprise approval; their equipment is owned by the parent enterprise; members do not risk either their investments –as there are none– or their personal incomes but only the amount of income for which they work in leisure time).

Further significant differences are occasionally exhibited by the sphere of business activity depending on the *social* affiliation or standing of members. Intellectual service, for instance, has found frameworks under the influence of many local, occasional circumstances; it is a less relevant point whether its form happens to be PJT, GMK, small cooperative or VGMK than the social standing of the persons engaged in the given activity, as determined by their qualification as well as by the business relations that have been and can be formed through the general employer (designing, organizing, or research institute). Similarly marked differences are shown by VGMKs formed in the state-owned large-scale industry, in the building industry, and in other sectors.

Social and economic features of the different forms

Before a review of the most common form of private enterprise the GMK, I should like to make a short reference to PJT (Civil Law Partnership), the other form of private enterprise association. The PJTs are typically communities in which intellectuals of the capital city are doing intellectual work –many kinds of designing, organization and computer services. (There are very few rural ones.) The membership is recruited from a rather definite stratum, usually of graduates. This form used to be originally attractive because, amidst measures of several intstitutes banning small enterprise, the formation of a PJT did not require approval of the employer, furthermore because, unlike in the case of GMK, membership is not limited. It also seemed that to form a small cooperative the investing of capital and the buying of shares was needed. For this reason the PJTs only needing the cost of association and then relying on knowledge as intellectual capital were

the quickest to come into existence. The speed of their increase was only surpassed by the spreading of their name and the general public first identified small enterprise with this three-letter abbreviation. And although PJT has become a household word, this form lost much of its initial popularity especially because of the high tax on the partnership and many of them were transformed as early as in the first year into GMKs or small cooperatives with much more advantageous taxes (often with formal shares of small denomination.).

GMK (Business Partnership)

The most popular form of private enterprise. With its 4200 organizational units and a more than 24.000 strong membership, it represents the second biggest share in small enterprises after VGMK.

However, the figures showing its spreading will at once shrink in the mirror of comparisons; for example in the same period five times more, that is, 120.000 private artisans were working in the country (even if part of them only at a fraction of capacity as pensioners or part-timers) and the blank areas of unprovided regions indicate that this number is not enough.

Also the majority of GMK members usually keep their original jobs as the PJT members do. In the first half of 1983, 25 percent of the membership i.e., less than 4000 persons) worked as full-timers for the GMK; this percentage amounted to 23 in the case of the 2000 employees.

According to activities the GMKs can be classified in three groups of approximately the same size. Those providing *intellectual* services are, by their major socio-economic parameters, obviously akin to PJTs. Also the GMKs organized for the purpose of *miscellaneous* services of a baffling multitude of colours (matchmaking, teaching of sports, organizing of parties etc.) are in many respects similar to the above.

The most promising ones are those engaged in industrial activities: these about 1300 small organizations are the hoped-for units of the "background industry" of the economy and they enlarge the number of the so badly missed small organizations. There are also other aspects from which this category is the most noteworthy one. For example this is where a trend of economic importance has unfolded, even if in modest dimensions: the investing of money into production instead of using it for saving or personal consumption. These small organizations namely need capital to function: workshops, machines and money to buy materials.

It is understood from different sources –for example from data of a narrow survey by means of questionnaires, among the members of the small-enterprise section just formed within the Chamber of Commerce, from conferences held with GMK managers and experiences of personal interviews– that though capital required for starting had been collected, it was far less than what would have been required for "the assets that are expected by the given activity" and either money or confidence or both were not sufficient to acquire the necessary assets. However, thanks to regulation issued in due course and permitting to form an untaxed development fund, most of these new enterprises are willing to spend part of last year's profit on technological development and especially on buying machines. If they were available.

As I have found, the line of industrial activity a GMK selects depends not only on the starting members' professional record but also on their social standing. It is too early to construe types, still the characteristics of several typical groups are taking shape and precisely according to social strata.

One and perhaps the most important category is that of highly qualified experts belonging to the top of the profession and also aware of the international development trends. They are enterpreneurs in the best sense: they wish to enter into the market with top quality products, and devotion is as typical of them as are talent and the desire to let hard work be acknowledged in terms of money. Some, not too many, of them already gave up their previous jobs in the socialist industry. Sometimes because they were harassed. ("Originally all the seventeen of us started in the GMK as part-timers and now eight work for it full-time. This has happened so in part by necessity because we were molested a lot at the company. I had worked as a recognized chief of a section for 29 years and had always been treated as a perfectly dependable and competent expert. Now I was forced to choose and I had to leave the enterprise." –*Engineer.*) Others happened to quit from state industry years earlier because they got fed up with the clumsiness of the inert big organization. I met a GMK formed of promotion engineers whose members first "founded" a complementary industrial section of a cooperative farm to subsequently replace this relationship born by emergency by going independent and forming the GMK. (By the way, already three products of theirs won grand prix and golden medals at fairs.) The head of another GMK, another promotion engineer, had worked for many years as chairman of an industrial cooperative. He first obtained a license to manufacture his own patent in the capacity of artisan then formed a GMK with a few of his best skilled workers and his successful product is now being manufactured in this form.

Probably the quitting of such individuals is the reason of anxiety expressed by some authors for the state-owned large-scale industry. I nevertheless feel it is unfair to blame the small enterprises as trouble-makers. It is namely shown by data that in the past two years not more than one hundred or two of the several tens of thousands of the technical brainworkers at big organizations have resigned because of the GMK. The leaving of experts certainly causes difficulties for the given enterprise. I still do not fear for the "braindraining" of the state industry but much rather for its continued inability to make the most of the talents of people employed in it. Moreover: the loss suffered by one company or two is probably more than compensated by the benefit of the national economy which the activity, unleashed from strictures of big organizations, is willing and able to give in products, quality and terms of delivery.

Today it seems that small communities of top experts bestowed with high engineering knowledge, with their fewer restrictions, more daring risk-taking and quicker responsivity to internal and external demand than the big organizations, might be pioneering in the development of a more demanding, advanced and up-to-date commodity pattern in several fields.

GMKs formed by, or with the participation of, artisans represent another characteristic type of GMKs engaged in industrial production. Although in 1982 numerically not many were formed (at most 500 of the 75.000 private artisans joined a GMK) in the first months I had thought this to be one of the most promising forms. It seemed that such teams would be able of instantly answering the demands of the large-scale industry since the workshops of artisans were, at least partly, fitted with the

necessary technical equipment and also the willingness and practice of organizing business activities were present. Today I find that the GMK has still not become popular among artisans. Perhaps partly because the artisans themselves have been granted better opportunities, for example the staff of a private workshop may come up to 13 persons including members of the family and employees, and many GMKs work with less people than that. On the other hand they have been geared through the past 30 years to be cautious: they do not trust either the collective forms or the durability of present-day opportunities. (For instance it is typical that about no one joining a GMK gave up his trade, artisan's activity and business circle though this is only partly attributable to precaution, the other reason being the chance of increased income.) Moreover: the great majority of artisans adopt the mentality of the craftsman and not that of the enterpreneur, they prefer safe orders assuring solid living and would rather do commission work requiring high technical standards for the large-scale industry. The latter, however, still keep on the safe side in placing orders: they maintain the old relations established with an artisan but are reluctant to extend relations to GMKs.

A further characteristic type is the GMK consisting of two, three or five persons of some specialized knowledge, recruited from qualified skilled workers. Most of them are doing industrial service: maintenance and repair of the many kinds of special equipment of the large-scale industry, ranging from boilers to geodetical instruments. Such teams have been called into being mostly by the clumsiness of the national service networks. Occasionally the GMK members work in the same service company. The basis of enterprising is the specialized professional knowledge and leisure time which they are willing to translate into money, satisfying at the same time urgent needs of clients.

Engineers, artisans, skilled workers. It is already apparent how different the meaning of enterprising for them is and how different services they offer to the economy according to their respective social standing. It may be of relevance for social self-recognition if we can, as it is planned at our institute, get to know more about the *social* differences whereby also *economic* acts are determined.

Thus the intent to maintain the employee status is typical of the two forms of private enterprise, ie., most of the PJT and GMK forms: to keep belonging to the state and cooperative sector (for the sake of either the security of existence or because of the business relations that can be formed through it). The majority of private enterprises apparently do not want more than that at the moment: they want to become neither really "private" nor really "enterprise" which includes both the freedom and the hazard of self-employment. Especially as long as the socio-economic consequences of going independent are so uncertain. They have become part of the myth anyway: offices and the colloquial language already talk about them with a touch of thrill or appreciation as of the "small enterpreneurs" of the socialist establishment.

As noted above, beyond the special "enterprises" of this special "private sphere" every other form has been organized in the frameworks of the state and cooperative sectors. The most numerous, the VGMK, the working team that active and retired workers of the enterprise (business organization) may form, has been exposed to vexation from inside and outside ever since its creation.

VGMK (Enterprise Business Partnership)

According to the most widespread belief the enterprise teams are supposed to have formed in industrial enterprises. This misbelief that often influences administrative standpoints is probably fed by the name.

The majority of VGMKs, however, were not created in state industrial enterprises but in organizations belonging to other sectors of the national economy (research laboratories, state farms, design institutes, service companies and even cooperative farms).

More than 7000 economic organizations are functioning in the country and VGMKs were formed in 1250 of them (it even happens that there are 100 at one single place!) but this is only 17 percent of all the economic organizations. It could also be said that in 83 percent there are no VGMKs. More closely, from the about 1600 business organizations of the state and cooperative industry, VGMKs formed in 439 (27 percent) but none in the others, more than 70 percent.

The order of magnitude of staffs also belongs here: the majority of active earners, not less than 4 million from the total of 5 million, work for economic organizations. The membership of VGMKs is less than 2 percent of them. Their share is not big in the parent organizations either: it is about 5 to 10 percent of the total staff.

Numerous hopes and doubts have been formulated about the VGMKs, within the industrial enterprises in the first place. The hopes were laid down first of all by those participating in codification and preparation. As it had been presumed at that time, VGMKs would form within enterprises where idle capacities and insufficiently engaged workers existed. There, through the VGMK, that is, the joint venture of workers and the company, good use could be made of both to the benefit of the general public and other clients. Moreover, even greater changes were imagined: "the massive forming of VGMKs might affect the structure and conditions in the establishments. They would develop large-scale production organized from below upwards, transform the typical big enterprise layout of 'manufactures within the same fence' and would by necessity call forth *cooperation,* the basis of large-scale production." In the internal conditions thus transformed, "from the point of view of control not only the company but also the community in it will be the partner", that is, the VGKMs would produce pluralistic conditions.*

The doubts and arguments, also meaning the large-scale industry, came from all directions: worrying for the health, leisure time and culture of VGMK workers; worries for the consequences of the unplanned outflow of wages: suspecting that VGMKs might use "stolen" worktime and labour power for production and that "might" be missing somewhere else; worrying for wage tension in the enterprise, and so forth.

The sharpest objections have remained hidden from publicity till now. However, as I have found it, there are two camps within about every organisation and although till now the opinion supporting the teams (ie., the one representing the official economic policy) could assert itself, there do exist stubborn disagreements and polemic papers are circulated confidentially.

*This opinion is represented by I. *Csillag* [8].

Although the crossfire of objections is focussed on the VGMK, it is quite obvious that, as a matter of fact, the real object of the discussion is no longer the VGMK but the interests of the business organizations, their staff requirements and the possibility of engaging supplementary staff while avoiding wage regulations, the practice of paying wages for full-time work vs. other working times, that is, one of the toughest problems of the whole economy. This is indeed the one where a solution must be found.

Several facts questioning both the hopes and the doubts are still worth knowing about the VGMK.

1. However, permissive we are about the criteria of "enterprise", it is clear that, except for those engaged in the building industry proper, the VGMKs do not possess any of the criteria of enterprise. Their organizational dependence is obvious: their formation requires approval of the manager and normally they may only work for their own company. Their formation does not need capital (the amount of about 1000 forints pooled to cover the costs of formation is not supposed to be considered a "capital investment"), they have no choice of client nor of orders, and their autonomy is limited to accepting or refusing to perform an activity for a fixed sum which the company accepted. Nor can they invest their income into the "enterprise" and they risk nothing but, at worst, the loss of income that can be earned in leisure time. In the present form the VGMK is not an enterprise but merely a contractual relationship between a company and its workers for carrying out some given task and the names "enterprise business partnership" or "business team" are only substitutes for "work brigade".

2. It follows also from the above that it is hardly reasonable to attach ideas to VGMKs working with industrial enterprises like the following: "small-scale and large-scale activities coexist and cooperate" or "the VGMK is a collective enterprise inside the enterprise"*. It is also evident from regional data that the enterprises that took the move are *not* the ones with excess capacity or workforce but big enterprises claiming to suffer labour *shortage* mainly in Budapest and in bigger industrial centres have availed themselves, to their own advantage, of the opportunities offered by the VGMK; they want to profit from the extra working time their workers have to sell. Their workers are quite frequently forbidden to accept external commission. (In a good part of the cases this is unrealistic anyway, as the knowhow of the workers cannot be used without the technical equipment, special materials and the given technological process of the industrial enterprise.)

3. Instead of the predicted and hoped-for internal structural transformation there has not happened more than assimilation of the VGMK to the large-scale plant and its moulding into the pyramid of division of labour controlled from the top. I could quote a large number of examples from forbidding to form a VGMK which the enterprise did not consider necessary for its own purposes up to the compulsory keeping of records indicating even the working hours of members and revised by the enterprise. The given structures of organization are preserved rather than transformed by the VGMK in its present-day form.

It has also become quite obvious that the trend of the anticipated pluralism could

*See on this subject the recently published book by I. *Kalász*–Gy. *Szepesi* [9].

not assert itself in the frameworks of the given economic system and, at least within the narrow bounds of business, the VGMK cannot become a suitable agent of change.

What were then still the achievements through the VGMKs?

1. In the light of data of activities, the majority of VGMKs (55 percent) are engaged in industrial activities; another 20 percent do intellectual work and 19 percent work in construction.

The VGMKs engaged in building deserve to lead the list especially as they have met the expectations attached to VGMK the best. Many, though not all, of them represent a joint venture of the enterprise and its workers: the workers work on buildings with machines and equipment lent by the enterprise—for a rent!—mostly on Saturdays and Sundays, contributing to the satisfaction of the invariably great demand for building and maintenance. It is part of the many kinds of benefits of their work that they satisfy real public demand and mostly drain the purchasing power of the population.

The majority of the intellectual VGMKs were formed in research, development and planning institutes, and they, too, work on outside commission. Although the interests of their "parent organizations", the institutes, might give rise to a variety of doubts (e.g. it is possible that one of the arguments in favour of the activities of VGMKs originates from the wish to preserve the present large sizes), but without the VGMKs, many tasks that are important elsewhere would undoubtedly be refused.

The VGMKs engaged in industrial activities are active in every field of the national economy, ranging from the processing plants of state farms through bus garages and hospitals to hairdressers, and perform a big variety of work, in which mechanical engineering is dominating. It seems that the chronic shortage of qualified workers in several trades and the shortage of parts that are relatively easy to manufacture could be quite easily solved by the additional employment of a few dozens of workers in this way instead of doing that in overtime which is more rigorously regulated.

According to estimated data about 40 percent of the VGMKs in industrial enterprises work in the main line of production to accomplish the planned, sometimes export, tasks and make up for the missing workforce. About 50 percent perform services related to production (from maintenance to cleaning), often replacing external cooperation that would cost the double. About 10 percent perform intellectual work.

VGMKs have been sporadically formed for tasks so far not attended to at the enterprise (recovery of wastes), and even more sporadically for working on outside commission, not for their own enterprise.

VGMKs performing industrial activity, with all the inconsistencies of this form, and the occasional and ostensible violations of rules governing working time or wages, considerably alleviate the disturbances of the economy, decrease shortages as well as the secondary tensions. (Unfortunately, the benefit of smoother running and of damage prevented can at best be felt but cannot be measured, as against the outflow of purchasing power wich can be calculated with high accurarcy and which, owing to its *measurability*, may become a stronger argument.)

2. It has been revealed by our scrutiny that the VGMKs in industrial enterprises are usually formed from the most competent and reliable workers. If I want to give a portray of the most general type I could give the following list of the main characteristics in brief: skilled worker, about 40, working at the enterprise for 17 or 18 years, who already belonged to a higher wage bracket than the average because, by virtue of his age and

experience, he *ab ovo* had higher basic wages and earned at least one and a half time the average in his own enterprise inclusive of overtime, special task premia and by contracting for a second job. There is a greater variety but this type has been found to be the most common.

The typical membership of VGMKs of industrial enterprises consists of *top workers* of the enterprise on whom the quantity and quality of production always strongly depended.*

The performance of this staff is acknowledged as excellent and offers marvellous examples for rational work organization. Over and above the excellent performances based on the knowhow, experience and readiness of selected men, perhaps one of the most important lessons of their work is the importance of being ready for and capable of organizing the work independently. It is absolutely sure that the same ought to be given more freedom to assert itself also in full-time work.

In my opinion one of the anxieties is justified in the present economic situation of the country, namely, the outflow of more purchasing power than planned. However, its extent—and the trends of many other symptoms—cannot be safely predicted from available data. Although the outflow of money can be controlled by restrictive measures against VGMKs, we would very likely lose more than gain owing to the reproduction of economic disturbances and shortages.

The dominating form and the typical behaviour

Up to now two conclusions derive from the data and the socio-economic parameters: 1. Of all forms the most widespread one is the VGMK which was expected to be a joint venture of the enterprise and its workers but which actually functions as a mere work brigade. When the specialized teams of industrial and service cooperatives showing very similar traits are also included (this similarity was first noted by Gy. *Varga* [11]) then the two of them represent 63 percent of the new business organizations and 79 percent of the membership. 2. Instead of the entrepreneur attitude, the employee attitude has remained to be typical: *a few tens of thousands of people, mostly brain workers and skilled workers, offer their labour power, knowledge and leisure time for sale in a legally institutionalized manner.*

Except the small enterprise, the affiliates and the small cooperative which are full-time jobs in this respect, the above is characteristic of nearly the whole membership of the new small organizations.

One cannot but try to guess the reasons why just that and so much has come true of the changes the green light was expected to bring about. Beyond apparently simple reasons some guidance may be also given by a few cicumstances indicated by the research work done by ourselves and others.

I am alluding to three mutually amplifying circumstances, namely, the employee

*G. *Kertesi* and Gy. *Szirácszki* [10] use the term "elite worker" for the circle I name top workers. I find this an important distinction because those I would consider as "elite" according to their key status at the enterprise and their income, are not VGMK members.

attitude, the public repercussions to small enterprises and the economic conditions under which they function.

The employee attitude

It is a well-known and traditional employee strategy of life trying to sell one's labour power without affecting the individual's social status. Income originating from extra work done at the detriment of leisure has always played a big role in improving individual living circumstances and the case is the same today. At a conference held in Spring 1983, György *Szepesi,* showing a laudable sense for sociology, gave an analysis of the forms of extra work the different strata and groups of workers traditionally perform as well as of the circumstances that keep this ambition—or sometimes exigency—alive. Mainly young people are forced to undertake extra work, if there is any, to earn the costs of buying a home and furniture and of founding a family.[12]

Although there is no exact information about the standard of living and goals of people participating in small enterprise, a few data are already available. Two sample surveys covering the whole country [13, 14] dealt with incomes earned after full-time work. From the point of view of this subject only one aspect, namely, the ratio of people undertaking extra work, will be stressed. The data of the two studies are in agreement. According to data of a sample survey of 1500 persons covering the population in working age, 55 percent of qualified workers, 50 percent of semi-skilled workers and 47 percent of unskilled workers do some amount of extra work inside or outside their work place or sometimes in both ways.

According to the other one covering the working young people, the rates are as follows: extra work is done for additional income by 30 percent inside and by 26 percent outside the work place. The dominating forms are overtime inside and, for 55 percent of the interviewed people, some job corresponding to professional knowhow and qualification outside. (Neither of the surveys inquired about the time input of extra work, whether it was 10 or 100 hours a month, nor about the amounts of money made.)

We cannot assess as yet how much the circle of people translating leisure time into profitable working time increased as a result of small enterprises, and especially not for those belonging to other social strata. Our until now scattered findings which hold mainly for the VGMKs show that those joining the teams come mainly from the same circle: from those who have always been ready to work more. This is indicated by on-the-job case studies* as well as by the data recorded for the whole country by the National Office for Wages and Labour.** On the other hand: many people who found that their secondary

*Since its formation, our team set up in the Munkaügyi Kutatóintézet (Research Institute for Labour) has dealt with small enterprises with special respect to relations between the new forms and the socio-economic environment. In two years a number of studies and case studies were prepared analyzing especially the GMKs and VGMKs in minute detail.

**In Spring 1983, the Regional Department of the Állami Bér- és Munkaügyi Hivatal (National Office for Wages and Labour) collected with the help of the labour administration of counties data about at least three parent organizations a county having VGMKs. On the same spot they interviewed at least 3 VGMK members and 3 non-members each, asking them to answer particular questions. [15]

incomes were sufficient (mainly owners of household-plot farms) did not take the chance of becoming a VGMK member. (15 percent from the 41 percent who voluntarily did not join a VGMK said to have already had an other secondary income.)

A good many of those wishing to benefit from their working capacity have not and probably will not ask for more than additional earnings. The same is indicated by their financial goals. 35 of the about 160 VGMK members who personally answered the questionnaries of the Office worked for a home and the majority simply for maintaining a standard of living which the family was accustomed to. (This naturally covers a big variety of individual situations and objectives from single mothers raising children to keeping up a comfortable way of life.) Buying or keeping cars was mentioned as a goal only in three answers showing that the majority would do more work for quite basic necessities.

Our samples only cover VGMK members and, by strict statistical standards, neither of them would be found representative. I suppose, however, that the answers given by VGMK members in every county and formed in the most different organizations as well as the uniformity and plausibility of their financial goals are sufficiently verified by our daily experience.

The fact that the employee strategy of life is a fairly general one is indicated also by the income strategy. Although some are addicted to work day and night for more money, much more people would be satisfied to make as much money in the VGMK as they had earned earlier in secondary jobs outside the enterprise. There are also people who do not mind to earn even less than their earlier income outside the enterprise had been, given the advantages of doing the extra work at the enterprise. In other words: it is a reasonable probability that most of the persons participating in small enterprise and especially in VGMKs are interested merely in the chance of extra income which they can earn without a change in their social status and which they consider to be sufficient.

Among those working in the other forms, usually only those changed status whom circumstances and in particular the pressure of their immediate environment at the place of work forced to make a move. Very few people turned from employee into self-employed entrepreneur just because they found it attractive. However, the ambiguous repercussions of society did not make it easy in their case to leave the job held in the state or cooperative sector.

The repercussions of society

The response of the general public to small enterprises was studied by two surveys.* Both of them were recorded in the first months of 1982, moreover, the one conducted among the youth was started already in December 1981 at a time when public opinion could hardly sense anything. It was typical of both that the majority of interviewed persons, relying on the knowledge they had, identified the small enterprise mainly with private artisanship, having a private taxi cab or keeping retail or catering shops under

*The result of the poll made among young people is contained in the work of I. *Szabó*, (op. cit.) [14]. The study prepared in April 1982 by the Section for Public Opinion Polls of the Research Institute for Mass Media is reviewed by K. *Farkas* in her paper [16].

contract, that is, the advent of private ventures was postulated. It is all the more remarkable that 52 percent of the interviewed young people said they would like to venture some kind of small enterprise and another 24 percent supposed that "many people must be inclined to do it." 58 percent of those interviewed thought that small enterprise was compatible with socialism. Most of them were of the opinion that small enterprises (as they meant them) would promote the solving of economic problems, furthermore, that the standard of services and supply could be thus improved.

Four months later in a questioning of adults 92 percent of the interviewed supposed that small enterprises would be beneficiary. Most persons expected better supply and services, a wider range of choice and better satisfaction of demands. (Only a few of them, however, expected any substantial improvement in the situation, ie., a palpable decrease of shortages, competition for buyers and diminishing service prices.)

Thus, according to these data, public opinion did not take a negative stand but was looking forward to the small enterprises, assuming that their activities would improve the living conditions.

However, the members of the small enterprises that were set up had to face the response of their immediate environment and not the general view or the "public opinion". This response depended on the form of their organization in the first place. I have found that the new forms like small enterprises, affiliates and small cooperatives set up in the frameworks of the socialist system of organizations did not provoke any special curiosity. Practically only members of forms considered private enterprise, namely, PJT and GMK, as well as VGMK (although this latter one can hardly be regarded as private enterprise) experienced unwelcoming attitudes of the closer and broader social environment, many kinds of small offices, bosses and colleagues.

During the last nearly two years I got acquainted with numerous PJTs and GMKs working in different fields. I found that about all of them had *had* a story. Many had tried to find legitimate ways by obtaining licences as artisans, the sponsorship of an ÁFÉSZ (General Consumption and Sales Cooperative), or a cooperative farm ready to accept their activities as auxiliary line. Other groups or individuals had been, let us use the common term, simply "privateering". As soon as the opportunity was given they changed from the earlier emergency ways to carry on their activities in some convenient legal form.

It follows that all who formed a PJT or a GMK represent at the same time the group willing to observe law and order, as against all others who have continued to keep out of the bounds of legality offered to them and have continued to do moonlighting work and make untaxed income. Still, those persons who were willing to work legally (I could quote numerous conversations showing their strong preference for legitimate ways) and who strengthen authority relations in society with their declared voluntary obedience, were frequently exposed to rebuff they had never met in "privateering".

While several high authorities granted them maximum individual support, they had frequent conflicts at their work place with the immediate environment or potential clients and similarly often they felt the aversion of officers working with higher organs. Prejudices nurtured for many decades (though lately subdued) against "privateering" persons surfaced from open or hidden repugnance. The passion of stubbornly persisting stereotypes is fed from their assumed quick accumulation of wealth and unscrupulous profiteering. Aversive feelings occasionally precipitated as conflicts of no solution and in

such cases the regular job was abandoned. They are also still quite frequently repelled by potential clients, eg. industrial companies, saying that "no order is placed with privates"

In addition to the usually personal experience of conflicts they also meet the dislike of those supposing that they only add to the variety of functional troubles of the economy. Differences between small enterprise forms are typical also with respect to public repercussions. Let us continue with the private enterprises. The stereotypical prejudices often having dogmatic ideological background have, namely, become the harshest against these small autonomous communities seeking buyers for their products, services and capacities, thus trying to find their place in the functioning of the economy. No wonder these stereotypes practically lack any postulation of a solid existence and way of life established through honest work as well as any acceptance of the financial and moral acknowledgement deserved by special knowledge or by undertaking special hardships (worktime till night, stepped-up rate, sacrificing of weekends, etc.). Perhaps it is not surprising either that the prejudices and worries became fixed in the reasoning of members of definite groups of society much rather than in that of the "general public". According to the said research, young people were of the opinion: "he who works hard deserves good earnings". Many young people argued with grown-up sound reasoning that "anyway, the tax system will not let people grow too rich".

From the point of view of those concerned, who must be more susceptible to the aversion of the immediate environment, negative opinions would at worst dishearten them if their chances of functioning and the circle of customers were not affected. In this way, however, their vital interests as well as their postulated role in the functioning of the economy are blocked. Very little has been done to settle the *social status* of participants in enterprises, for changing value judgments following from a given dogmatic approach which has become obsolete from the point of view of social and economic development, and for the elimination of opinions of inherent inconsistency which accept moonlighting and refuse the licensed activity. Jenő *Andics* correctly states that politics have given only pragmatic treatment to the issue of small enterprises (I think is much more than nothing) and that cannot substitute for a "careful analysis of the ideological challenge" [17]. Otherwise only the number of unanswered questions will multiply, and exactly in the minds of strata with the strongest influence upon the thinking of others, while the old answers, also advocating the socialist interests, are flowing freely through informal channels. The building of confidence naturally requires honest work from the new organizations and a way of life up to the socialist values and standards from members. I have found that the big majority of persons chosing legitimate activity consider the same to be their natural goal. The lack of confidence itself may work in favour of the hasty exploitation of supposedly temporary chances and this in turn strengthens suspicion against the ventures. Mistrust inevitably ends up in a deadlock unless it is eliminated.

Initially and at some places up to now, VGMK members, like PJT or GMK members, were blamed for making money by 'finesse'. But as their activities are performed under the eye of enterprise opinion and the colleagues themselves can see that they work usually with stern discipline, great intensity and often in all their leisure time, malice and assaults were gradually tamed. (By the way, VGMK members personally contribute to relieving tensions at some places, for example by the voluntary limitation of their incomes. It was observed in the case of the best earning VGMK members that they, *restricting themselves,* set a ceiling (of about 10 to 13 thousand forints a month) on their

total income at the enterprise, so as to include the full-time and part-time earnings they thought to be fair and tolerated by the public opinion of the enterprise. It would be useful to know income strategies more thoroughly especially as these are at the same time indications of the acceptance of assumed or real public values, and of observing social standards by instinct or by voluntary will, and thus much could be revealed about the tendency of the prevailing social consensus.

The VGMKs and especially the parent enterprises are apparently no longer worried by the opinion of the immediate enterprise environment. They are haunted rather by the recurring danger of conditions being changed from outside. (For instance by a directive to the effect to pay the VGMKs from the wage fund of the enterprise.)

Economic conditions of operation

According to one of the widely quoted expectations, the small organizations could, by virtue of their flexibility and adaptivity, prompt the big ones to compete. This may happen some time but, for the time being, the small ones are battered by the daily problems of functioning.

Relations between the private sphere, whereto from the new organizations the PJT and the GMK belong, and the economic administration are–from the point of view of obtaining the resources necessary for operation (money, means of production, materials, labour)–obviously of a different quality than the relations of small and big organizations belonging to and dependent on the pyramid of economic control both organizationally and through the persons of appointed managers.

As a matter of fact, it was an objective that the small enterprises should be free to determine their respective spheres autonomously and without subordination; they should find out where their products or services are needed and make their own decision between finding another sphere of activity or winding-up when that demand has ceased out. This way their activities are located in a zone uncovered by state control – although that zone is quite severely limited by a number of environmental conditions.

The starting capital for the ventures is not provided by the state (except for small enterprises and affiliates) but it must be contributed mainly from the assets of members. (The exceptions being that banks or innovative funds become partners through the contribution of capital for the purpose of manufacturing products, generally inventions or patent goods, which require substantial input but are also expected to sell very well.)

The experiences of two years, however, indicate that mainly such PJTs and GMKs, postulating actual personal contribution, have been set up which required no or little starting capital.

The *activities* suggest that funds must be invested only in organizations engaged in industrial (27 percent) and building industrial (14 percent) activities while in case of intellectual and other activities representing about 60 percent, human capital usually substitutes for funds.

Whenever the start would need money, even if only for a while, the formal way of raising credits has been till now a hopeless case. Except a few special cases like the joint manufacturing and marketing of products based on inventions, there was actually no

credit available to assist the majority of the private ventures working in routine "background" industrial lines–as funds specially allocated for that purpose are missing.

In many countries big enterprises help the setting-up of small establishments by transferring equipment and technology, sometimes also the state helps in direct ways, through the allocation of starting capital and tax facilities. In Hungary, even lending is a problem.

It is a considerable advantage from the point of view of establishing the conditions of operation that the small enterprises may separate an untaxed development fund. They have been found to make good use of this opportunity, especially those engaged in industrial activities. But even if there will be a will to invest and buy machines, it will come up against the nearly unsurmountable obstacle of the underdeveloped market and insufficient supply of equipment. A new venture simply cannot afford the price of a new machine – while the availability of second-hand machines is poor because the potential sellers, the big enterprises, cling to their machines even if not used for years and written off to zero value in their books. (An analysis of the fixed assets of the industry shows that in the period between 1976 and 1982, when despite the containment of investment the volume of fixed assets was steadily growing, the low, already 0.6 percent scrapping rate kept on decreasing to 0.2 percent and the rate of scrapped *machines* was even smaller.) [18]

It might be a solution to rent machines. Many small enterprises would much prefer to pay rent for the occasional use of machines to buying expensive machines. In spite of some sporadic initiatives, however, a renting system is not likely to be soon established.

Amidst the lasting or *ad hoc* shortage of different materials required for production, which is a problem also for big enterprises, the small ones suffer multiple disadvantages owing to their position and size.

The field where the small ventures are in undoubtedly better position than the big ones is the availability of one of the resources required for functioning, namely, labour. Especially as the small organizations, disinterested in increasing the staff for love, only want the leisure time of their actual or to-be members whenever this is possible. And this is quite a plentiful resource.

Relations existing between the small organizations and the environment receiving their "outputs" is apparently more harmonic than in the case of resources. Although one dozen small organizations or two are wound up every month, the products and services of the majority are generally bought all the more as the number of small organizations is still too small compared to the insatiable demand of the people and of production.

Owing to two circumstances, however, the market is confined to a size smaller than it could be. The first one is the tax system whereby production is discouraged. The old way which artisans have used for a long time, i.e., to suspend their activities in a given part of the year so that their incomes should not exceed the limit of heavy progressive taxation, is now also applied by the small organizations turning out the most successful products. The tax of about 82 percent on an annual income over the sum of 200.000 forints, which restricted personal incomes, simultaneously set limits to production. The wider limits of the new tax system will open the way for greater output.

The second circumstance narrowing the market is the receptivity of public organizations and especially of state enterprises. In the course of our scrutiny many cases of mutually satisfactory and strengthening relations were heard of–but firm refusals as

well. I feel that fear from the appearance of corruption is the most important one of the various reasons for the reluctance of state enterprises and institutions. Not only because some persons would try to tempt an official in the interest of an advantageous contract, but also because this temptation might grow along with the strengthening relations between the two spheres. Especially as the market is inevitably created through personal contacts. The "invisible hand" of Adam Smith, concerning demand and offer, means the real well-known hand one can hold—this hand and the like help in establishing relations. Indeed, where is a guarantee of integrity? As it is shown by the big international bribing scandals, it is hard to provide protection against corruption all over the world. And still, it is supposed to be the more promising way to consider rather as many offers as possible, ie., to expand relations instead of knocking them down.

The relationship between small and big organizations is dominated by the attitudes of the big enterprises. Their receptivity is the precondition to the establishment of the so badly missing "background" industry and at the same time it can encourage the formation of new small organizations.

Two important characteristics are shown by the summary of conditions of operation:

On the one hand: the social and economic environment has given little incentive for the functioning of the existing small organizations and for the formation of new ones; the opportunities opened up by statutes have been strongly curtailed by environmental conditions. The value of the status of these ventures is judged with uncertainty and society watches their work with more suspicion than encouragement. Conditions are not yet given for their integration into the economy.

On the other hand: partly for the afore-said reasons, the new business organizations are cautious and distrustful. Distrust must be in the background of the caution in the investing of capital and in the keeping of jobs. This is a natural behaviour, and it is also due to past experiences. Generations are still alive in Hungary who saw how masses of people lost their limited means produced in a life's work or perhaps by the work of older generations, how small workshops were wound up and how professional competence and experience became unwanted. The present experience is not sufficient as yet to relieve this distrust. The measures taken so far for the promotion of small ventures do not yet transmit any safe guarantee for the security of existence.

People would like to trust but the building of trust needs undisturbed experience through some longer period of time. Any step making the material conditions of operation better would automatically contribute to greater trust.

The economic role

It would be easy to go enthusiastic and praise the marvellous economic adaptivity of the Hungarian society with reference to ten thousand small enterprises—as well as to give a sympathetic nod to any pathetic lament referring to the same small enterprises. But I do not think that either way is right. Something has started but we are still far away from the results hoped for.

Although there is some change in the field of services in the broad sense yet the

contribution of new organizations is not too much. The lasting deterioration of the situation was brought to an at least temporary halt by forms of *individual* enterprise, that is, the lease and contracting introduced earlier in the retail and catering trade. It was due chiefly to the increasing number of artisans that the demand for transportation of goods and passengers could be better met, at least in Budapest. The number of artisans began to increase also in other branches, although nearly 40 percent of the active ones work part-time or as a second job. But the areas of shortage in commodity supply and services only attracted a small fraction of persons associated in the new forms of enterprise.

If enterprising spirit and incentive fail to grow then the new organizations may for long not be expected to contribute substantially to the alleviation of shortages and especially not in spheres affecting living standards.

There has not been any appreciable change in the activities and organizational system of industrial production either—nor is it likely to happen for the time being. Although the two-way process (making independent units from factories of big enterprises and trusts by higher decision and creation of small enterprises) caused some change in the internal proportions of the notoriously overcentralized system of organizations, the ventures developing in the environment of large-scale industry are too sporadic as yet to speak about any satellite enterprises serving the large-scale industry or about the emerging "background" industrial activities. Nobody reckons with rapid change, nor does the rate experienced so far justify any hope for profound improvement.*

Nor have the problems of employment alleviated. The acute shortage of labour, the fear from the migration of workers are problems especially of the large-scale industry and, from the regional point of view, of the organizations functioning in the capital city and major rural industrial centres. On the other pole stand the lasting unemployment problems and the lack of employment opportunities in several counties [20]. The big industrial companies have considerably improved their labour conditions by organizing VGMKs. According to our own studies, they successfully satisfy their labour requirements from various sources like overtime, secondary employment, foreign workers, cooperation by subcontracting and the *VGMK*. (And all that while being *interested* in decreasing the staff by 3 percent a year because the wages of those leaving could be thus used to increase the wages of those staying.) The VGMK, however, means that the *given* workers are additionally employed and as such, it does not create new jobs. This is the very reason why VGMKs were not encouraged in counties facing durable employment problems (and even prohibited at a place). The aim was to prevent some people to have access to extra work and extra income while others have absolutely no opportunity to work. It is known that neither migration of labour was induced nor new jobs were created by the others forms of organization either. In the very areas where small enterprises would be necessary, like in Szabolcs, Vas and Zala counties, their scarcity shows the missing of a vivid business life that could produce demand.

*The distance between the current rate and the necessary degree of changes in the restructuring of the industry by size of enterprises is illustrated by the international comparisons made by I. *Schweitzer* [19] and P. *Pozsonyi* [20]: The Hungarian economy would need several tens of thousands of small organizations to tilt the pyramid, now standing upside down, back to its foot.

Economic difficulties are not favourable anywhere for making the existing small enterprises viable and evoking new ones. However, the domestic conditions can be made much better. It is due not only to the short time but also to social and economic conditions that the present-day small organizations have no or little capital and are basically "part-timers". For the time being the same is true about their economic rôle as well.

References

1. Hegedüs, A.–Márkus, M.: The small enterpreneur and socialism. *Acta Oeconomica,* Vol. 22 (1979) Nos 3–4, pp. 267–289.
2. Havas, G.: Public savings and production finance. *Acta Oeconomica,* Vol. 28 (1982) Nos 1–2, pp. 109–132.
3. Falus-Szikra, K.: On enrichment in Hungary. *Acta Oeconomica,* Vol. 29 (1982) Nos 1–2, pp. 47–68.
4. Sárközy, T.: Szervezetrendszeri adalékok az állam gazdasági szerepének újraértékeléséhez (Contributions to the organizational system for the reassessment of the economic role of the state). *Valóság,* 1983. 10.
5. Schumpeter, J.: Unternehmer. In: *Handwörterbuch der Staatwissenschaften.* Vol. 8 of 4th revised edition. Jena 1928. S. 476–487.
6. Weber, M.: *Wirtschaftsgeschichte. Abriss der universalen Sozial- und Wirtschaftsgeschichte.* Duncker und Humblot, Berlin 1958.
7. Weber, M.: *Wirtschaft und Gesellschaft. Grundriss der verstehenden Soziologie.* Erster Band, Kiebenhauer und Witsch. Köln-Berlin 1964. S. 257–267.
8. Csillag, I.: Az új „vállalati" szervezet alapvonásai (Basic features of the new "enterprise" organization). *Valóság,* 1983. 7.
9. Kalász, I.–Szepesi, Gy.: *A kisüzemi gazdálkodás új formái* (New forms of small-scale business). Kossuth Könyvkiadó, 1983. 116 p.
10. Kertesi, G.–Szirácki, Gy.: Munkások a munkaerőpiacon (Workers in the labour market). *Valóság,* 1983. 7.
11. Varga, Gy.: A kisvállalkozás (The small enterprise). *Valóság,* 1982. 9.
12. Szepesi, Gy.: *A kisüzemi gazdálkodás néhány társadalmi összefüggése* (Some social connexions of small-scale business). Proceedings of the Conference on Tasks of New Types of Organization and Experiences of their Activities, Országos Vezetőképző Központ, Budapest May 1983.
13. Tardos, R.: Magatartástípusok a családi gazdálkodásban (Types of behaviour in family business). *Közgazdasági Szemle,* 1983. 1.
14. Szabó, I.: *Ismeretek és vélemények a kisvállalkozások lehetőségéről* (Data and opinions about the viability of small enterprises). Ifjúsági Lapkiadó Vállalat Sajtó és Közvéleménykutató Osztálya. Budapest 1982.
15. *A vállalaton belüli gazdasági munkaközösségek működésének tapasztalatai, különös tekintettel a bérezési eltérésekből adódó esetleges ellentmondásokra* (Experiences about the work of internal business teams of enterprises, with special respect to disagreements if any due to wage differentials). ÁBMH Területi Főosztály (State Office for Labour and Wages, Regional Department) May 1983.
16. Farkas, K.: *Közvélemény a kisvállalkozásokról* (Public opinion about the small enterprises). Hungarian Radio and Television Research Centre for Mass Media, Budapest May 1983.
17. Andics, J.: Politika és gazdaság (Politics and economy). *Valóság,* 1983. 7.
18. Füsti, P.: Helyzetkép az ipar állóeszközállományáról (A review of the fixed assets of the industry). *Figyelő,* September 1 1983.
19. Schweitzer, I.: *A vállalatnagyság* (The enterprise size). Közgazdasági és Jogi Könyvkiadó, Budapest 1982. 130 p.

20. Pozsonyi, P.: *A magyar ipar vállalati struktúrája, 1982.* (Enterprise structure of the Hungarian industry, 1982). A dissertation. Manuscript.
21. Munkaerő-gazdálkodás. Egyensúly és feszültség (Labour management. Equilibrium and tension). An interview with J. Rózsa, director of ÁBMH. *Figyelő,* June 9 1983.

МЕЛКОЕ ПРЕДПРИНИМАТЕЛЬСТВО В ВЕНГРИИ МИФЫ И ДЕЙСТВИТЕЛЬНОСТЬ

Т. ЛАКИ

Наряду с индивидуальными частными предприятиями в области производства и услуг (например, кустарной промышленности, приусадебных хозяйств в сельском хозяйстве, арендой и эксплуатацией на договорных началах предприятий торговли и общественного питания) в Венгрии с 1-го января 1982 г. мелкие хозяйственные единицы могут образовываться и в форме *товариществ.* В статье рассматриваются общие черты и особенности этих т. н. «мелких предпринимательств», количество этих организаций, численность и состав их членов, а также их роль в экономике.

Общественное мнение в Венгрии с большим интересом следит за ростом числа и деятельностью этих организаций, создаваемых в интересах лучшего удовлетворения потребностей населения в сфере потребления и услуг, а также создания мелких, производящих комплектующую продукцию хозяйственных единиц, отсутствие которых так ощутимо в организационной структуре народного хозяйства и, особенно, промышленности. Со времени их образования было высказано много, в отдельных случаях крайне отрицательных или положительных мнений и предположений.

Автор на фактах развеивает эти различные мифы. Она показывает, что большинство новых организаций возникло в социалистическом секторе народного хозяйства: мелкие и дочерные предприятия были и остаются в государственной собственности; часть мелких кооперативов выделилась из крупных, то есть изменились лишь размеры предприятия, что обеспечивает возможность более гибкой деятельности. 65 процентов новых организационных единиц возникло в рамках организаций социалистического сектора: создаваемые с учетом своих работников и пенсионеров хозяйственные товарищества на предприятиях, а в кооперативах — специальные группы. В них занято почти 80% членов новых организаций. Первоначально предполагалось создание совместного предпринимательства предприятия и его работников по использованию свободных мощностей, недостаточно занятой рабочей силы для производства дефицитных товаров, использования отходов производства и т. д. Вместо этого хозяйственные товарищества и спецгруппы, можно сказать, работают исключительно для своих собственных предприятий, кооперативов, восполняя недостаток рабочей силы для производства, технического обслуживания и ремонта оборудования.

Создаваемые частными лицами товарищества на основе гражданского права (188 организаций, объединяющие около 1000 членов) и хозяйственные товарищества (около 4200 организаций, объединяющие 24 тысячи членов) организовывались в первую очередь для оказания интеллектуальных услуг, не требующих вложения капитала. Из их числа 1200 организаций заняты промышленным производством, и, примерно, столько же ведут строительную деятельность. (Образование с целью промышленного производства организаций составляют один процент от общего числа частно-

кустарных заведений.) Пока экономические и общественные условия открыли лишь узкие возможности для развертывания промышленной деятельности.

В целом в мелких предпринимательствах принимает участие около 2 процентов самодеятельного населения страны; и, можно сказать, почти все они сохранили свое основное место работы и используют в рамках мелкого предпринимательства только часть своего свободного времени. Сложившееся положение не обещает значительного улучшения ни в условиях жизни населения, ни в развитии мелкого комплектующего и смежного производства.

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SMALL-SCALE AGRICULTURAL PRODUCTION IN HUNGARY

I. OROS

In the success of Hungarian agriculture an important role is played by small-scale production, carried on by members of cooperatives and workers of state farms, as well as by people, not engaged full-time in agriculture, in their household-plots and auxiliary farms. Relying on the 1981 agricultural census, the paper provides a detailed picture of this production, comparing it with the data of the 1972 census.

Hungarian agriculture has achieved outstanding successes in recent years. The high rate of per head meat and cereals production and of agricultural exports earned Hungary a distinguished position in the hierarchy of the countries of Europe and of the word.

After decades of inertness, development started in the early 1960s by swithching over to large-scale production. It was an important achievement that the rapid changing of the production organization was not followed even by a temporary setback and, as the new production technologies were learned, outputs were growing and production became ever more intensive. With the stabilization of agricultural cooperatives development became fast as well as smooth. From 1970 to 1981 the production volume grew by 43 percent i.e. by about 3 percent on a yearly average. In the given period, the world average was 0.5 percent and the European average 1.2 percent. (In 1982 agricultural production grew by 5 percent in comparison with the preceding year, which is again an outstanding achievement of the Hungarian agriculture.)

In the course of development, agricultural organization has become polarized in a special way. On the one hand, agricultural production has concentrated in ever bigger agricultural farms, and on the other, with very small farm sizes the present form of small-scale agricultural production has developed.

The good results achieved in large-scale production overshadowed for a long time that the great many small farms produced, together, quite an important volume. Understandably, attention was focussed on state farms and agricultural cooperative farms embodying the socialist form of ownership. As an ephemeral category, small-scale production was not only considered as having slight interest, but also its socio-economic necessity was judged with growing uncertainty. Also several restrictive measures were taken, first in order to secure enough labour for the cooperatives, and then to constrain incomes earned in the household-plots.

The conflicts developed around small-scale production demanded an unambiguous economic and social policy standpoint. It was practically the decision of the Central Committee of the Hungarian Socialist Workers' Party made in 1975 that finally put an end to confusion. The temporarily tolerated small-scale production thus arrived at being judged as "socially useful". With its important role in supply recognized, restrictions were replaced by stimulation, which gave new impetus to its development. Practice has proven

that small-scale production has a right to exist beside the large-scale agricultural farms producing at high standards. What is more, the results of large-scale production even encouraged the development of the part of agriculture remaining outside the large-scale farms. Small-scale production came into an increasingly close relationship with these. In recent years, the production patterns of both large-scale and small-scale farms have been changing in adjustment to each other and completing each other, so that a division of labour well adjusted to circumstances has developed between the two types of agricultural farms. Thus, small-scale production contributed to increasing exports beside amply supplying the home market.

The small farms that remained after the socialist reorganization of agriculture can be divided into four groups. The most important of these are the *household-plots* of the cooperative members, which come from the same time as the cooperative movement, and which have developed an increasingly close cooperation with the large-scale farms. Before collective farming became consolidated, their role had been to build a bridge between the earlier individual and the future collective farming. Besides, they freed the collective farms from having to produce the full quantity of food needed by the members, and they could add something to the members' initially low income, earned in the collective farm. Also, household-plots are to be credited with rendering reorganization free from any serious troubles in some resource-intensive branches, especially in animal breeding. Later, their role played in self-supply and in local supply was gradually replaced by production for the market.

In addition to the cooperative farms a few *specialized cooperatives* were also formed, in most cases for wine- or fruit-growing. With a certain amount of collective activity, the members continued to work the greater part of their plantations individually, as household-plots. Although the area left to be worked by members of the specialized cooperatives was never too big, it has always been difficult to judge the role of this type of farming, because of the heterogeneous and transitory character of these farms. Namely, these cooperatives carry on, beside the typical forms of household-plot farming, middle-peasant-level production for the market, and the bigger ones even employ seasonal wage-workers.

At the time when the agricultural cooperatives were organized, about 100.000 peasants did not enter, in most cases because they lived in such areas, for example, in mountains, where large-scale farming was not possible. Most of these *individual farms* have ceased since.

The auxiliary farms (plots) of those groups of the population which are not engaged full-time in agriculture are composed mainly of the land kept by workers who left agriculture, and by pensioners, as well as of the allotted plots of the members of state farms and of other institutions. The majority of these plots produce for household needs, and only a few of them are specialized in some kind of production for the market, though in some branches (mainly in animal breeding), this new phenomenon has been seen lately.

Because of problems of surveying (low number of occurrence, population impossible to represent by a sample), when grouping statistical data, we list the specialized cooperative (household) and the individual farms with the auxiliary farms, first of all in order to clearly have before our eyes the data of the most important group: the household-plots of the agricultural cooperative members.

In Hungary, the term "small-scale production" was born in the mid-1970s and from

that time it has indicated a category maintained in the long run. It covers the agricultural production activity pursued on a small scale by households belonging to different social groups with their own labour.

The production carried on in household-plots and auxiliary farms has grown—in spite of a considerable reduction of the number of household-plots and of a less considerable one in that of the auxiliary farms—almost to the same extent as the production of the large-scale farms; it has, therefore, contributed significantly to the development of agriculture.

In the course of recent years, somewhat more than one-third of the gross output value of agriculture has been produced by small-scale agricultural units, that is, a volume approximately the size of the average exports of these years, mostly composed of such products which large-scale farms have so far failed to produce efficiently.

Small producers do not grow cereals, they have small areas under industrial plants and rough fodder, and shrinking areas under maize. These plants are much more efficiently grown by the large-scale farms. At the same time, the greater part of vegetables, potato, fruits and grapes come from small-scale production. The essential point of the Hungarian small-scale production is often misunderstood, especially abroad. It is not to present competition, in the form of flourishing private farms, to large-scale farming, but a rational system of cooperating organizations has been established with them in agriculture. The household-plots and auxiliary farms are not diminished and isolated peasant farms, but production units completing the activities of large-scale farms and integrated by them. Also, the large-scale farms provide the conditions of farming for the small producers: without their assistance, this mode of farming would shrink very much. All this has to be emphasized because, though less frequently now, an unjust confrontation or incorrect comparison of the two ways of farming is still met with.

The social aspects of small-scale production are worthy of attention, but little known. It has been mentioned that, because of its wide coverage, this form of production does not affect peasants alone, but all groups (strata) of society as well. It makes use of the fragments of labour power, or the surplus labour of the members of the household. Small-scale production is usually undertaken in order to earn additional income and to achieve higher living standards, but also traditional elements have their part in its survival.

It is first of all people living in village settlements who are in a position to pursue small-scale production, and within it, animal breeding. To some extent, this determines the sphere of small producers from the outset. In recent times, large groups of townspeople have been seeking active recreation in gardening.

Small-scale production is qualified a typical form of the "second economy", although it is open to question, whether the activity helping to complement wages which are lower in the village than in the town, and giving occupation to dependants, is not the "first economy" for many. Countrywomen who have no permanent employment, pensioners often find their primary source of income in small-scale production.

A comprehensive picture of small-scale production had been first provided by the 1972 general agricultural census. Since then, data have been regularly recorded on the most important partial fields, such as animal breeding. However, another comprehensive investigation of the most important socio-economic aspects of small-scale agricultural

production was enabled only by the 1981 agricultural census.* Because of financial limits, this survey was of much smaller dimensions than the one of nine years before. Comparability is assured by the use of identical concepts and groupings in data processing.

In the following I shall rely on the data of these two censuses in discussing the situation of small-scale agricultural production and the tendencies of the last ten years.

The social aspects of small-scale production

Small-scale agricultural producers represent a wide sphere in Hungarian society.** In 1981 the agricultural census covered round 1.5 million households considered as small producers. This means 4.5 million individuals, that is, 42 percent of the population.

In fact, an even greater part of the population is engaged in agricultural production. The number of the small producers living in towns (not covered by the agricultural statistical censuses) is estimated at 100.000 and, in addition, about 700.000 households have gardens or animal stock not reaching the level defined above in the footnote. The latter usually do their gardening, or keep poultry, rabbits, or bees at their family house or weekend-plot of land. Thus, altogether 2.3 million households –almost two-thirds of the total number–do some agricultural work occasionally or regularly. This exceeds by far the rate of those employed in agriculture (19 percent), or that of the village population (48 percent), and clearly indicates that beside the peasant population also members of the working class and of other social groups, townspeople take part in small-scale production.

Of the households pursuing agricultural activity on a smaller scale than the lower limit of small-scale production as determined in the census, we can obtain a picture on the basis of the investigation of the Unified System of Household Budget Surveys made in 1978. The data revealed that about 350.000 households have a plot of land of about 400–800 square metres which is enough to produce the greater part of the yearly vegetable and fruit consumption needed by an average family. (This may justify the surveying of these households at the next census.)

Reverting to the sphere of small producers, their number fell by 11 percent between 1972 and 1981, corresponding to an annual rate of decline something over 1 percent.

The reduction in numbers is to be traced to two main reasons. One is the constant emigration from villages, the other the natural ageing and dying out of those belonging to the traditional peasant groups. As a consequence of migration, earlier farms cease to exist, and the descendants of the ageing peasants are not always prepared to undertake all the work involved by small-scale production, as their parents did, thus small-scale production

*The detailed data were published continuously by the Central Statistical Office [1, 2, 3].

**At the census those households were considered small producers (farms), whose agricultural farming area reached 1500 sq m (or, in case of a garden, orchard or vineyard, 800 sq m), or who kept one so-called big animal (cattle, horse, sheep, goat, mule, buffalo, ass), or at least 50 grown-up poultry, 20 female hares or 20 colonies of bees.

Table 1
Changes in the number and ratio of small producers

Farm	Small producer households				
	No. (thousands)		1981 in percentage of the 1972 number	Distribution (percent)	
	1972	1981		1972	1981
Household plots of the members of agricultural cooperatives	782	674	86,3	46,5	44,9
Auxiliary farms	752	741	98.5	44.6	49.4
Members of specialized cooperatives and individual farms	147	85	57.8	8.8	5.7
Small producers total	1 681	1 500	89.2	100.0	100.0

is shrinking. The rate of decline in the number of small producers is the same as that of the number of the village (rural) population.

The lasting tendencies are made palpable also by the fact that the number of small producers in the two main types changed differently between 1972 and 1981: the number of the household plots of cooperative members fell by 14 percent, while that of the auxiliary farms practically did not change.

As for the other types of farms, the number of members of specialized cooperatives fell to its half, that of small-commodity producers (independent individual farmers, craftsmen, shopkeepers, etc.) fell by one-third. This fast reduction shows clearly that the producers do not see a perspective in agricultural production pursued independently of large-scale farming. (In the subsequent parts of the present study these farms will be dicussed, as I have already mentioned, together with the auxiliary farms.)

By grouping small producer households according to occupation of the wage-earners, the increasing role of the population of non-agricultural occupation will become even more conspicuous.

More than 30 percent of the small producer households belonged to the working class in 1981. Although decreasing slightly in number, their ratio is almost threefold of that of peasants who are members of agricultural cooperatives.

It shows the high mobility of the peasant class that the number of the "purely" peasant households (including only active earners doing physical work in agricultural cooperatives) fell to its half since 1972. In 1981 also the number of households with a double source of income (some members engaged in agricultural cooperatives, others in other kinds of manual labour) engaged in small-scale production was less.

As opposed to the considerable decrease in the number of pure peasant families, the number and ratio of farms of people of non-manual occupation, and of pensioners have been growing in the last years.

About 260.000 households of those of non-manual occupation—more than the number of cooperative peasants—participated in agricultural small-scale production in

Table 2
Composition of the small-producer households by social groups and classes

Class, group	Small producer households		
	Division (percent)		1981 in percentage of the 1972 number
	1972	1981	
Working class	30.4	31.2	91.4
Cooperative peasantry	21.4	11.2	48.2
"Double" income earners	11.8	8.9	67.1
Of non-manual occupation	9.2	18.1	167.6
Small-commodity producer (craftsman), shopkeeper	5.4	3.7	62.3
Inactive	21.8	26.9	112.1
Total	100.0	100.0	89.2

1981. Since 1971, their number increased by almost 70 percent, in which also the fast spreading fashion of "hobby" farming and gardening had a part.

The second biggest group after the working class is that of the inactive earners —most of them pensioners and rentiers—the number of their farms grew by 12 percent since 1972. In 1981 in more than a quarter of all the small producer households there were only pensioned (retired) earners. Aged peasants and village workers do not give up their earlier way of life when they are pensioned, but continue farming, by tradition or custom, adjusting the amount of work to their reduced abilities.

Those living in small-producer households are tied in different ways to small-scale production. The majority of those in the working age, and many of the retired people work in the household plot or auxiliary farm. However, among the consumers of the products of these farms are those, too, who do not work there. On account of family relations and friendship, small-scale production affects a much wider sphere than just the members of the small producer households. This number will especially grow, if we include those producing in small gardens and the consumers of their products.

We drew up a time budget of the full economic year of 1972/1973 to report on the work accomplished in the household-plots and auxiliary farms. It turned out that, on a yearly average, the agricultural small producer households spent daily 4.5 hours in such activity. Summing up these hours, they amounted to somewhat more than the total number of working hours performed in large-scale farms. Since then, the time spent in agricultural work has decreased by 39 percent in state farms and agricultural cooperatives, while not at all in small-scale production, because of the high rate of manual labour. It seems likely that much more working time is spent today in small-scale production than in large-scale farming. This is indicated by the preliminary results of the investigation of working time in small-scale production in 1982.

According to the data of the earlier investigation, 55 percent of the working time fell to women, and 61 percent to pensioners and dependants. Dependant women worked daily 4 hours in small-scale production.

Distribution by *economic activity* of the members of small producer households differs from that of the total population of the country. The ratio of active earners somewhat increased, other than in the total population, and the number of inactive earners grew as well. At the same time, the ratio of grown-up dependants decreased. This latter is, however, still much higher than the national average and, as has already been mentioned, this group represents one of the most important sources of labour in small-scale production. At the same time, this fact indicates that there still are much fewer jobs available in villages than in towns. Some improvement has been made in this field through the location of industry in the country, but countrywomen still have difficulties in finding a permanent job. For lack of other jobs, they earn their living in small-scale production.

Table 3

Distribution of the population by economic activity (percent)

Denomination	Population of the country		Population belonging to small producer households	
	1970	1980	1972	1981
Active earners	48.3	46.7	42.7	43.1
Inactive earners	13.5	21.6	14.3	20.7
Dependants, above 14 years	18.4	11.0	23.9	17.3
Dependants, under 14 years	19.8	20.7	19.1	18.9
Total	100.0	100.0	100.0	100.0

In the small producers' farms the number of grown-up dependants and helping family members fell by more than a quarter i.e. by 450.000 since 1972, which reduced the labour capacity of small-scale production.

Occupation of the members of small producer households were classified in the same way in 1972 as in 1981. The biggest ratio—one third—was at both dates that of manual workers. Within this, however, the ratio of agricultural manual workers decreased, and that of non-agricultural manual workers increased. The number of inactive earners —mainly of non-agricultural manual workers—rose considerably in 9 years. The growth of the ratio of the non-manual workers in the small producers' households is striking.

The fast increase in the number of inactive earners indicates a tendency of fast ageing. The age of each member of the households had been included only in the 1972 census. It was already then conspicuous that the ratio of the elderly age groups was higher than in the total population, while that of the young age groups, just entering work or

Table 4
Distribution of members of small producer households by occupational groups

Occupational group	Members of small producer households		
	Distribution (percent)		1981 in percentage of the 1972 number
	1972	1981	
Agricultural active earners	17.5	14.7	73.6
Of which:			
manual workers employed in large-scale farm	14.3	12.2	74.1
non-manual workers employed in large-scale farm	1.3	1.6	111.1
Active earners engaged outside agriculture	25.2	28.4	98.6
Of which:			
manual	19.5	21.7	97.3
non-manual	5.1	5.0	101.6
Active earners, total	42.7	43.1	88.3
Inactive earners, (retired, rentiers, etc.)	14.3	20.7	127.3
Of which:			
earlier engaged in agriculture	8.4	11.0	114.9
earlier engaged outside agriculture	5.9	9.7	144.9
Dependants	43.0	36.2	73.7
Grand total	100.0	100.0	87.5

already earners (from 14 to 34 years) amounted to only 27 percent as opposed to the national 33 percent.

In 1981 the investigation covered only the age of the small producer (head of the household), however, the ageing process is clear from that, too. Since 1972 an important change took place in the age distribution: the number of the 50-year-old grew considerably, while that of others had diminished, most of all that of the young age groups, at any rate of smaller numbers. If it is taken into consideration that the inactive age group represented the biggest weight at both dates, a further deterioration of the age composition foreshadows that, as the oldest will fall out, the number of small producers will be decreasing in the coming 10 years faster than it has been in the past decade. This will affect, of course, the volume of small-scale production, which is also expected to decrease faster in the foreseeable future if unchanged profitability conditions are assumed to persist.

Table 5
Changes in the age composition of small producers

Age	Number of small producers		
	Distribution (percent)		Development (1981 in percentage of the 1972 number)
	1972	1981	
Under 30 years	7.2	5.5	69.3
30 to 39 years	15.7	15.0	84.8
40 to 49 years	22.1	19.9	79.7
50 to 59 years	16.4	23.8	129.0
60 years and over	38.6	35.8	83.3
Total	100.0	100.0	89.2

The activity of the old people dropping out of production can only temporarily be compensated by the improved production and profitability conditions.

Means of production of small producers

It is among the characteristic features of small-scale agricultural production that it is carried on with few new production equipments, little financial input, and a lot of manual labour. Apart from a slight amount of tractor work, it does not draw away means of production from the large-scale farms, but uses its own old implements which cannot be profitably used in the large-scale farm.

Area

Agricultural small producers have always had a much smaller share of the agricultural land than their share in plant cultivation. This is explained by the fact that the ratio of the intensive branches of cultivation (gardens, orchards, vineyards) is high and increasing in the small farms, and a considerable part of the small parcels of land are in the direct neighbourhood of the dwelling-houses, which also improves the possibility of very intensive cultivation.

The total land area at the disposal of small producers was 23 percent less in 1981 than it had been in 1972. (As a reminder: the number of small producers fell by 11 percent during the same period.) A farm had, on average, 0.54 hectares* (0.62 in 1972).

In fact, the small producers disposed, theoretically, of the area mentioned above,

*1 hectare (ha) = 2.471 acres.

but they cultivated much less than that. This is because in recent years an important change has taken place in land use: some of the small producers' household and allotted plots—earlier taken out of the fields of the large-scale farm—now are not distributed, but cultivated by the large-scale farm. Against this plot, the small producer receives a share from the produces grown there, or their cash value. Thus the large-scale farm "redeems" the use of the household or allotted plot. (This territory is also called "ideal" household or allotted plot.)

Table 6
Ratio of the land area held by small producers by land use*

Year	Area in percentage of the country's agricultural land			
	Arable land	Pasture, meadow, forest, reeds	Garden, orchard, vineyard	Total
1965	18.8	5.3	59.0	17.3
1970	18.9	5.6	59.7	17.3
1972	18.6	5.4	60.7	17.0
1975	15.8	5.0	61.6	15.2
1981	10.2	3.9	64.4	12.2

*Together with the collective area of the specialized cooperatives.

This redeeming needs some explanation. In Hungary the cooperative law entitles the members of agricultural cooperatives to have, provided they fulfil certain conditions, a household plot (generally 6000 square metres). Earlier, most of these plots were measured out from the cooperative's own land. However, this amounted to breaking up the fields of the large-scale farm. As production standards were rising through application of modern technologies and production systems, the average yields of the large-scale farms increasingly exceeded those of household farming. It was therefore reasonable to extend large-scale farming to part of the household plots. Under the terms of this redemption the members receive, with the costs of cultivation deduced, practically the same amount of fodder as the land would have yielded under small-scale farming. And the large-scale farm receives the additional yield and the cost of cultivation in kind. Legally, the land still belongs to the member who pays a tax on it. As a matter of fact, the small producer lets the large-scale farm some of the land due to him.

The 1981 investigation covered both the actually cultivated and the redeemed lands. (Of course, it may be asked, why not only the actually cultivated area is considered. As a matter of fact, the redeemed areas contribute with fodder as well as with other allocations to the production of the small farms. Besides, these areas are not separately registered by the large-scale farms.) Land redemption is often a formal legal transaction:

the large-scale farm cultivates the household plot, charge the costs of cultivation to the yield, and delivers what is left to the member. It is quite often that this all happens only in theory, since the large-scale farm buys back the yield.

The area actually cultivated by small producers was much smaller than the total of the area at their disposal, since 54 percent of the area of household plots and 10 percent that of the auxiliary farms were cultivated by the large-scale farms. In the final account, therefore, in 1981 the small producers cultivated an area less than half of what they had worked in 1972.

In 1973 land redemption had been still negligible: it had affected only the rentiers of cooperatives, and pensioners. By 1981 already 40 percent of the small producers –almost three-quarters of the members of agricultural cooperatives–were affected by the redemption of household and allotted plots.

Table 7
Land area by main types of farms

Farm	Total agricultural land* thousand hectares		1981 in percentage of 1972	Actually cultivated land in 1981		Redeemed land in percentage of the total area
	1972	1981		thousand hectares	in percentage of 1972	
Household plots of members of agricultural cooperatives	526	514	97.8	235	44.6	54.3
Auxiliary farms	522	522	56.6	268	51.2	9.6
Total	1 048	810	77.3	503	47.9	38.0

*Together with the data of redeemed household and allotted plots.

More than three-quarters of those entitled to hold household and allotted plots received, by redemption, a certain amount of produce, and exactly 5 percent received both produce and cash from the large-scale farm. Approximately one-fifth received only cash.

According to size of the actually cultivated area, small producers are represented in the largest number in the category of the smallest area: three-quarters of them have either no land, or a plot under 0.5 hectares.

On the basis of the actually cultivated area, the average cropland of a farm was 0.34 hectares in 1981.

A close correlation exists between the age of the small producer and the size of the area he cultivates. The older generally cultivate more land than the young. However, on reaching the age of retirement, they reduce their land. Up to 60 years of age, hardly any

Table 8

Distribution of the number of, and area held by, small producers, on the basis of their actually cultivated lands

Area	Distribution of the					
	number	agricultural land	number	cropland	number	agricultural land
	of household plots		of auxiliary and other farms		of the total of small-scale farms	
	(percent)					
Without land and under 0.2 hectares	39.6	6.5	49.3	11.4	50.1	9.1
02. to 0.4 hectares	28.6	19.2	31.2	23.5	30.0	21.5
0.5 to 0.9 hectares	24.2	44.6	13.3	24.4	18.1	33.8
1.0 to 1.9 hectares	7.0	24.3	4.0	16.0	5.3	19.9
2.0 hectares and bigger	0.6	5.4	2.2	24.7	1.5	15.7
Total	100.0	100.0	100.0	100.0	100.0	100.0

Table 9

Size of land in the household plots of agricultural cooperatives according to age of the farmer (head of household)

Age	Total	Actually cultivated	Redeemed	Of 100 farms, holding redeemed land
	area (hectare) per 100 farms			
Under 30 years	72	25	47	80
30 to 39 years	78	31	47	77
40 to 49 years	86	38	48	75
50 to 59 years	87	43	44	72
60 years and older	67	32	35	72
Total	76	35	41	74

difference exists in the frequency of redemption, but the size and ratio of the redeemed area is smaller with the oldest, who could be best helped by this system.

The rational division of labour spreading in recent years between large-scale agricultural farms and small producers includes also the system of land redemption. The

large-scale farm applying modern technologies reaches higher yields on the same land. Thus, on the national economy level, more fodder can be produced. The released working time and the fodder received against the household plot can be used by the small producers for developing animal breeding and horticulture which is more difficult to do on a large scale.

On the other hand, an unfavourable aspect of land redemption is that, with some of the small producers, it does not contribute to agricultural production. Of the half a million household plots affected by redemption, approximately 100.000 had neither land, nor animal stock. With them, therefore, the household and allotted plots had no part in small-scale production, but were, in fact, a form of complementary wage. (Because of this, the Ministry of Agriculture and Food has recently restricted financial grants.)

In an examination of the land area it cannot be left out of account that the animal breeding of small producers relies mainly on fodder produced by the large-scale farms, the volume of fodder from own production is decreasing: it has fallen to half in ten years. If small producers had to produce the necessary quantity of fodder themselves, they ought to produce it on a land three times as big as in 1981.

The actually cultivated area of household plots and auxiliary farms is composed in most part of small parcels on which no intensive large-scale farming is possible. This holds particularly for the plantations of small producers, since their way of planting and situation allow only the traditional methods of production. As for the gardens of dwelling-houses and holiday homes, there can be no question of anything else but small-scale family cultivation. Gardens, vineyards and orchards together constitute 34 percent of the land cultivated by small producers. Thus the actual form of land use draws away only a small area from the state farms and cooperatives: small producers cultivate mostly such lands which could not be rationally used in large-scale farming.

Fixed assets

In 1972 small producers had disposed of fixed assets worth approximately Ft 42 thousand million: a quarter of the fixed assets stock of agriculture. Although no new data are available on the subject, it is likely that the present rate is lower than that of 1972, in spite of an increased machine stock, since the stock of buildings and other fixed assets of the small producers decreased.

After the large-scale reorganization, very few of the buildings, machines, and other assets –representing a high value on the whole– could be used in the cooperatives and in the state farms. Through small-scale production, however, these capacities were not left unused, but most of them continued to participate in production. According to an earlier computation, if the products grown in small-scale farms ought to have been produced by large-scale farms, the latter would have needed such an amount of investment as the whole agriculture received from 1966 to 1975. And this was not possible at that time, and even less today, when investments are restricted.

The majority of small producers had various farm-buildings. The number of these have recently been falling, however, apart from stables, to a lesser extent than the number of small producers. This amounts to saying that those who have good farm-buildings are less prone to liquidate their small-scale farms.

Table 10
Number of farm-building owners in percentage of the total number of small producers

Building	1972	1981	1981 stock in percentage of the 1972 stock
Stables	28	22	75.5
Pigsties	75	75	98,7
Wine-cellars	22	22	93.3
Barns	11	12	99.2
Maize sheds	29	28	92.0

The stables—representing the highest value among the buildings—are not adequately utilized: in 1972 horse or cattle had been kept in only half of them, in one tenth small animals had been kept, and in 40 percent no animals at all. In 1981 the capacity of the stables was even more underutilized.

It is usually the older generation of small producers that has stables: those above 50 years (making up 60 percent) had 72 percent of the stables. The proportion was similar with the rest of the buildings.

Of course, there are large differences in the number of stables and the degree of their utilization among the farms belonging to different social classes and groups. As compared with the 39 percent ratio of those closely tied to agriculture (members of cooperatives, small producers), only 13 percent of the non-manual workers had stables. The former kept cattle or horse in two-thirds of their stables, the latter not even in half of them. Many of the farm-buildings originally intended for agricultural production of a larger scale are now used as workshops or garages.

The 1981 census did not cover the technical parameters of the buildings, but in 1972 these had been surveyed. Approximately 60 percent of the stables registered had been built before the war, and those made from mud or adobe were present in a similar ratio. Stables and other farm-buildings are rarely made beside the new village dwelling-houses, at most pigsties and poultry-houses which are of much lower value. In 1972 the supply of the buildings with public utilities was not satisfactory. Some improvement has been made in this field since then.

During the last years, a fast development has taken place in the mechanization of agricultural work done by small-producers. The most important role in this has been played by the machines of the large-scale farms. According to a survey of 1978, in the production of maize and potato—grown on the greater part of the area worked by small producers—ploughing was done by the large-scale farms in 75 and 49 percent, sowing and planting in 60 and 7 percent, transport in 51 and 20 percent resp. This kind of work was done to much greater extent in the household plots than in the auxiliary farms.

Beside the important amount of mechanical aid, the number of agricultural machines owned by small producers grew to manyfold since 1972. Small producers have today already about 13.000 two-axle tractors and tens of thousands of other

motor-driven small machines, most of them suited for caring after plants, but this number is by far not sufficient. Only 3–4 machines fall to a hundred small producers, which explains why most of the work has to be done by the machines of the large-scale farms, or by hand.

Although small producers own only a quarter of the number of two-axle tractors possessed by the large-scale farms, this is more than what the entire Hungarian agriculture had had before 1952. At the same time, it has to be taken into consideration that many of them are tractors sorted out by the large-scale farms, not suited to work with their original capacity, and only fit for transport and caring after plants.

Table 11
Machine stock of small producers

Machine	Number of machines			One piece falling to how many small producers
	1972	1981	1981 in percentage of the number in 1972	
	pcs			
Two-axle tractors above 9 kW	3 141	9 037	288	166
Two-axle tractors under 9 kW	1 239	4 397	355	341
One-axle garden tractors	1 388	7 224	521	208
Hoeing machines	733	20 424	2 786	73
Universal motor-driven garden engines	1 004	2 702	269	555
Motor-driven portable sprayers	2 519	9 841	391	152
Other motor sprayers	1 780	12 209	686	123

The machine supply level of small producers is low. Small producers of non-manual occupation and those belonging to the working class generally had more machines than the cooperative peasants. The older generation had fewer machines than the younger generation.

Beside a slowly improving supply with machinery a growing material consumption is characteristic of the small producers. The use of chemical fertilizers (calculated in effective agent) grew by 90 percent between 1972 and 1982, in spite of the actually cultivated area's shrinking to its half. Development was similar in the case of other chemical substances and plant-protectives.

As a consequence of increased mechanization, the material intensity of production grew considerably in nine years. The running prime costs of small-scale production had amounted to Ft 21.029 million in 1972, and to 29.978 million in 1981, i.e. to 39.0 and 48.9 percent, respectively, of gross output.

In comparison with the large-scale farms which spent more than 60 percent of their

gross output on production, this percentage is still very low. A great difference exists also in depreciation allowance: 10 percent in the large-scale farms, and 3 percent in small-scale production. The lower material and financial input also explains the often misunderstood and disputed phenomenon that, earlier, small producers produced more than half of the net output value of agriculture. Parallel with the growth of productive consumption, that is, with the modernization of production, the ratio of net output is gradually lowering, as it is indicated by the data. Of the net output value of agriculture, less than 45 percent came from small producers during the last years. Because of the numerous manual labour-intensive products, however, the share of small-scale production in net output will remain higher than in gross output.

The main characteristics of production

Within agriculture, small-scale production developed at a slower rate and to smaller extent (from 1970 to 1981 by 21 percent together with the collective activity of other cooperatives), than large-scale farms (by 58 percent). Thus their share in the gross output of agriculture shows a declining tendency (40.2 percent in 1970, 34 percent in 1981).

One of the characteristics of small-scale production is that its production pattern is much different from that of large-scale farms. In their gross output, the ratio of plant production to animal breeding had been 44 to 56 percent in 1970, and was 38 to 62 percent in 1981, as opposed to the ratio of 59 to 41 percent of the large-scale farms in 1981. (In the large-scale farms this ratio indicates a faster development of plant production, since in 1970 it had been 57 to 43 percent.)

As for its tendency, the share of small producers was rather stagnating in animal breeding, and strongly decreasing in plant production. As a result of the introduction of modern scientific technologies and large material inputs in plant production, the predominance of large-scale farms has been growing fast, while in animal breeding

Table 12

Distribution of the gross output of agriculture

Years	plant production	animal breeding	total gross output	plant production	animal breeding	total gross output
	of large-scale farms			of small producers*		
	in percentage of the gross output of agriculture as a whole					
1970	66.0	53.1	59.8	34.0	46.9	40.2
1975	72.7	52.9	63.7	27.3	47.1	36.3
1981	74.9	56.5	66.0	25.1	43.5	34.0

*Together with the collective activity of specialized cooperatives.

modernization is a slower process, and the results are spreading without delay also in the small farms. Therefore, this development is parallel in the two types of farms.

The fast decreasing share of small producers in plant production is explained, as it has already been mentioned, first of all by the imposing development of the large-scale farms. In spite of the considerable reduction of the actually cultivated area, small producers produced in 1981 almost the same value as 10 years earlier. This is due mainly to the development in fruit and vegetable production, and to a smaller extent, to that in the production of plants for industrial use. More than half of the horticultural products —potato included—was grown by small producers. As for other plants, their share is decreasing.

Table 13
Gross output of the most important plants in small-scale production in 1981 (at unchanged prices of 1976)*

Plant	Gross output			
	million Ft	distribution (percent)	in percentage of	
			the 1971–1975 average	the gross output of all farms
Wheat, rye	286	1.2	78.1	2.1
Barley, oats	236	1.0	68.0	7.0
Maize	3 779	15.6	61.9	18.4
Rough fodder	565	2.3	88.7	6.2
Sugar beet	45	0.2	375.0	1.2
Sunflower	63	0.2	140.0	1.2
Tobacco	671	2.8	279.6	65.8
Other industrial plants	353	1.4	261.5	17.1
Potato	3 029	12.5	92.2	59.1
Vegetables	4 797	19.7	134.4	56.8
Fruits	5 334	22.0	126.4	53.4
Grapes	4 318	17.8	89.2	58.6
Other plants	796	3.3	114.4	12.7
Total	24 272	100.0	99.1	25.1

*Together with the collective activity of specialized cooperatives.

In comparison with the plant production carried on a small and continuously decreasing area, the *animal breeding* activity of small producers, having increased the value of output by 20 percent in the last ten years, is disproportionately large. Its role is extremely important in pig and small animal breeding (poultry, rabbit, pigeon, bees). Pig-breeding in itself is almost of the same volume as the other animals together. (See

Table 14
Gross output of animal breeding in small-scale production in 1981 (at unchanged prices of 1976)*

Branch	Gross output			
	million Ft	distribution, percent	in percentage of	
			the 1971–1975 average	gross output of all farms
Cattle-breeding	7 553	19.2	102.5	27.3
Pig-breeding	18 832	47.8	119.2	57.7
Horse-breeding	67	0.2	91.8	41.6
Sheep-farming	729	1.9	145.5	19.7
Poultry-raising	9 976	25.3	131.3	42.7
Other	2 218	5.6	150.0	74.6
Total	39 375	100.0	120.0	43.5

*Together with the collective activity of specialized cooperatives.

Table 14) Small producers prefer species which can be dynamically bred and which require relatively the lowest input.

This development notwithstanding, the small producers' share in the animal stock of the country and in the production of the main animal products decreased, since development was faster in the large-scale farms. (See *Table 15*)

On examining the small producers' animal breeding activity, it must not be left unsaid that the greater part of the fodder used comes from the large-scale farms and that the numerous kinds of by-products and wastes, useless in the large-scale farms, can be well utilized in small-scale production. In 1981, enough fodder was sold or lent to small producers to raise and fatten 4 million pigs, while they did not produce themselves even 30 percent of the rough fodder and straw used up.

It is a new form of production cooperation that, in order to liquidate less profitable animal breeding farms, or to enlarge the livestock, the large-scale farms place some of the livestock permanently, or in a certain phase of their development with small producers. At the end of 1982, small producers tended 51.000 cattle and 220.000 pigs above their own stock. The conditions are highly varied, this form of relationship is widening and, at present, it is one form of manifestation of the integration activity of large-scale farms.

The regulation of and central influence on production could be made more efficient by a stricter system of production and sales contracts keeping both parties' interests in view. The situation is much better in animal breeding than in plant cultivation. It is, for

Table 15
Small producers' share in the country's livestock and in its output of animal products

Animal, product	1972	1981	1981 in percentage of the 1972 value
Cattle	35.9	23.2	62.1
Pig	60.2	51.6	117.5
Sheep	15.6	14.6	161.7
Grown-up poultry	76.7	74.1	126.2
Beef-cattle production*	49.4	46.3	119.3
Milk production*	43.4	28.0	113.5
Egg production*	68.7	63.2	129.8

*At unchanged prices of 1976.

example, an important result of the well coordinated measures of the last years that the pig cycle –the three-year fluctuations of the pig population– could be prevented. No similar solution has been found as yet to the numerous problems of vegetable and fruit production.

In recent years, not only the pattern but also the character of small-scale production has basically changed. While earlier, because of the deficient supply in villages, its number one task was to satisfy household, or at the most, local needs, and only a little amount of surplus was sold, lately it has been *production for the market* that has become prevalent. In order to earn a larger income, producers specialize their farms to a certain extent. It is a general phenomenon, that the increased quantities of certain products are today produced by a smaller number of small producers than before. The greater part of the products has been purchased by the state and cooperative enterprises.

Table 16
Sales of the small producers

	Small producers' gross turnover		
	in percentage of the 1970 volume	in percentage of their production	in percentage of the total turnover of agriculture
1970	100	39.9	24.2
1975	156	54.7	26.5
1981	189	62.0	25.3

The yearly increasing quantities of the products sold were forwarded to the purchasing organs by the state farms and cooperatives.

It presents a problem how to make any homogeneous goods of the products purchased in small lots. The products produced by large-scale methods are of an evenly good quality also in large volumes, thus they are more highly valued in trade. The regular supply of small producers with seeds and propagation material and the transfer of breeding animals to their care may improve the situation.

The results achieved so far in small-scale production have been enabled with the aid of the large-scale agricultural farms, that is, through a closer cooperation of the two different forms of farming. The main areas of support are the following: supply of machine work, fodder, advice, and sale of products. A better organization activity of the large-scale farms may further help a better utilization of the small-scale production capacities. The majority of large-scale farms treat the household plots as independent branches of farming and, to an increasing extent, also the auxiliary farms. In 1981 approximately 3000 large-scale agricultural specialists—of which 1800 full-time—were given the task to organize and control small-scale production.

Other forms of integrating small-scale production are also spreading. Within the framework of the "general consumer and sales cooperatives" approximately 2500 small producers' specialized groups worked in 1981, and within the framework of agricultural cooperatives about a further 200, altogether with about 220.000 members. The specialized groups represent an increasing economic power.

Agriculture of a small scale is found in every country of the world. There are "hobby-gardens", dwarf estates and, in the majority of the socialist countries, household plots. In the capitalist countries' agriculture, because of the small dimensions of farms in comparison with the technical standards, farming is pursued to an increasing extent part-time or as a secondary activity. This is in some respects similar to the small-scale production of Hungary, yet as for its essential point, is different. Thus, because of a greater similarity in form and contents, for Hungary a comparison with the European socialist countries—Poland excepted—may be of more importance.

Small-scale agricultural production is pursued beside large-scale production in every socialist country. At the same time, there are also certain differences among these countries, because of different historical developments and political judgements. A comprehensive statistical comparison is rendered difficult by the deviating specifications of the data.

The ratio of small-scale production is lowest in the GDR (about 11 percent), and the ratio of one-third in Hungary and Romania is the highest.

As a consequence of the different customs, natural factors, and development peculiarities of the countries in question, there are important differences in the share in production of the different products.

The high ratio of small-scale agricultural production in Hungary reflects also the results of the economic policy promoting small-scale production. The higher ratio of small-scale production in Hungary is owing mainly to the higher number of auxiliary farms, and to the higher share of vine growing and pig farming. Without these, the importance of Hungarian small-scale production would not rise above the average of the other countries. The judgement of the household and auxiliary farms has changed in all

Table 17
Share of small-scale production in percentage of the total agricultural production in 1980.

Product	Hungary	Romania	Soviet Union	Bulgaria	Czecho-slovakia	GDR
Potato	69.5	58.4	64.1	53.4	19.7	5.8
Vegetables	46.6	41.7	32.8	27.6	39.3	28.3
Fruits	51.0	49.5	42.1	39.8	59.6	59.7
Grapes	55.0	25.5	23.1	37.0	34.2	.
Beef	23.8	44.7	18.9	26.1	4.1	3.4
Pork	55.7	32.7	41.4	15.6	10.5	4.5
Mutton and goat meat	18.0	46.2	41.0	47.4	30.2	3.8
Poultry meat	36.1	47.0	28.6	35.4	6.4	5.0
Milk	31.1	55.6	18.8	26.1	5.0	.
Egg	62.0	60.0	32.2	54.2	40.6	.

*The heading of the Table lists the countries in the order of the share of small-scale production. Except for Hungary, the data of the CMEA countries are taken from the 1981 CMEA Yearbook.

the socialist countries: from the idea of having to liquidate them, they have arrived at promoting them. In recent years, several responsible political opinions have been heard on the subject, and now small-scale production has its place in the conceptions and plans.

Efficiency and incomes

Among the motives of small-scale production, we have mentioned self-supply and additional income. The two factors have had different effects on the activity in question. Production for supplying the household was the result partly of the insufficient commercial food supply to villages, and partly of traditions. Improvement of supply through trade will probably reduce the production of certain items (for example, milk), while that of other ones will be carried on owing to eating habits. Consumption of fresh fruit, vegetables, and poultry meat, and demand for pig-slaughtering are only slowly decreasing. As for vegetable and fruit production, the small gardens even enlarge the demand for up-to-date species and for a wider range of goods. In the production for household needs, profitability aspects are of no importance. This holds particularly for small-scale production pursued out of hobby, in which wages earned are invested in production, plantation, gardening machines, irrigating equipment, etc.

The primary aim of production for the market is earning an income. It is first of all the village population that have the possibility. Village families undertake small-scale production if they have enough labour force, means of production, and production experiences at their disposal. Labour is provided first of all by not permanently employed women and by pensioners, but the overwork of wage-earners is also of a considerable

amount. Beside the available labour, the dimensions of small-scale production are much influenced also by the degree to which the household is tied to agriculture and by the number of the active wage-earners in agriculture. That is, the size of the household-plot allotment depends on the latter.

Certain branches of small-scale production–first of all animal breeding–mean a permanent occupation, and this entails conservation of certain elements of the way of life of the small peasantry. The older generation do this from habit, but the younger are already less inclined to it. Usually, they undertake such work temporarily, when they have some big target to achieve (for example, home-building, or buying a car), and do it in a specialized manner, on larger scales than usual.

The work accomplished by the dependants and pensioners (its ratio being about 60 percent) is not of full intensity. In a great part it is done around the house, therefore, some of it merges with the household work and other activities around the house. If this is taken into account, it will be not surprising that labour productivity in small-scale production is very low: in 1972 it had reached only one third of that in large-scale farming. This rate has been further worsening, since productivity improved by 118 percent in the large-scale farms, while hardly any improvement has been achieved in small-scale production.

In 1972 the output per man-hour was Ft 16 from which an income of Ft 9–10 derived. Among other things, this low income level accounts for the fact that most of the younger members of families, who have usually higher qualification, seek other ways for earning, at least on the level of overtime at their full-time working place. As for dependants and pensioners, the work involved in small-scale production is usually not clearly separated, but merges with the whole day's activity around the house.

The living standards of different classes, groups, or units of society are usually described by the real value of per head incomes. Besides, the hardly measurable effect of living conditions cannot be neglected either. A fully objective measurement is not possible in the two largest classes of society: the working class and the cooperative peasantry, among other things because the deficiencies of the village infrastructure and jobs, and the problems of valuation of own consumption must not be left out of account.

In Hungary, the income level of households is determined at present almost without exception by the wages earned at the working place. The wages earned in the collective farms of cooperatives stay below the wages of workers employed in state industry or at state farms. During the last years, the difference has been diminishing; the average wages have been converging. It has to be mentioned that the wages of workers living in villages –many of whom are interested in small-scale production–do not reach those of workers living in towns.

To the wages is added the income earned in small-scale production. This is higher with those working full-time in agriculture, however, every group of the population shares in it. Even today, the small producer's income is often overestimated and "peasants" are said to be rich.

Generalization, however, fails in this case, as it always does. Undoubtedly, some of the small producers earn a large sum of money on one or two occasions in a year (for example, at harvest-time, or at the delivery of animals). But this cannot be identified at all with income, since production costs amount to approximately half (in animal breeding, to even more) of the gross output value of small-scale production.

Table 18
Wages of manual workers

Year	Average monthly wage (Ft) of			Average monthly wage of manual workers of agricultural cooperatives in percentage of that of workers employed	
	manual workers employed by agricultural cooperatives	workers employed in the state industry	workers employed at state farms	in the state industry	of state farms
1970	1698	2163	2214	78.5	76.7
1975	2580	3007	2822	85.8	91.4
1981	3846	4332	4057	88.8	94.8

In 1981, the small producers' average gross income per household was Ft 20–21.000, that is, a monthly Ft 1700, including their own consumption. This, however, cannot be considered net income, since it includes the value of labour as well as tax. (As compared with a gross income of Ft 10 per man-hour earned in 1972, this was Ft 16 in 1981.) According to our earlier computations, 3 percent of the small producers reached an income exceeding the threefold of the average. If this proportion is considered valid for 1981, the income earned in small-scale production could exceed yearly Ft 60.000 in about 50.000 households. It is beyond doubt that some of these earn exceedingly high incomes: in 1981 3118 small producers paid tax after a yearly income over Ft 150.000 and in 1982 4006.

In 1975 30 percent of the income earned in small-scale production came to the working class, and 23 percent to the cooperative peasantry. Because of the reduced number of peasants, however, this proportion has shifted since then to the benefit of the working class. These ratios make it clear that small-scale production can by no means be interpreted as an exclusively peasant source of income, even though, because of the larger volume of production on the household plots, the cooperative peasantry has a higher share in it.

In 1981, incomes earned in small-scale agricultural production amounted to 9–10 percent of total incomes in working class households, and to 25–30 percent in households of the cooperative peasantry. Taking into account the income from wages and from small-scale production, the per head income of the cooperative peasantry exceeded that of the working class by 4–5 percent in 1981.*

The size of income from wages does not affect small-scale production unambigu-

*It has to be made clear that the second economy cannot be measured with identical preciseness in every sector. While the incomes from small-scale agricultural production are relatively easy to trace, only a rough estimate can be made of the non-agricultural secondary activities.

ously. Lower incomes encourage, though, increased production for the market, but in such cases less of the incomes can be spent on the expansion of production, unless household consumption is restrained. Higher wages make it easier to purchase and enlarge the means necessary for production for the market, but in such cases small-scale production is undertaken only if it brings income in proportion to, or exceeding, wages.

As for incomes earned in small-scale production, two diminishing factors are yet to be mentioned. It cannot be disregarded that small-scale agricultural production involves risk. Bad weather, diseases of plants and animals, unfavourable price tendencies may have for consequence not only a loss of income, but also a material loss. In spite of this, the older generations of peasant origin take a high share in small-scale production. The risk involved in production has developed in small peasants a traditionally cautious way of life. With growing incomes, their living conditions have changed only a little, and this has led to accumulation of reserves. As for the young, many of them have left the villages, or work in towns. It is rather a general practice to support children who have gone to town with food and money. There are few data to support an estimation, so much is sure, however, that this is a one-way process, of dimensions not to be underestimated. (A kind of counter-item to this is the contribution of town-dwellers to small-scale production, especially at times of seasonal peaks.)

* * *

Small-scale production is exposed to the effect of an extremely high number of social and economic factors. In the future, the production of household plots and auxiliary farms will be developing as their resultant. The effects are in many cases of different or even of opposite direction, the volume of production may develop conforming to the stronger effect.

In forecasting the future of small-scale production, social interest must be the starting-point. It is beyond doubt that the national economy will need the products coming from small-scale production still for a long time.

Numerous examples show that small-scale production reacts quickly to changes in economic environment. In case of deteriorating income conditions, production declines at a particularly fast rate. On the other hand, development usually follows at a slower rate: it requires more time. Therefore, economic measures affecting production are to avoid sharp turns as much as possible. A far-sighted economic regulation, not without perspective, can help to shape production according to plan and even to securely fit into the plans. Production contracts, guaranteed prices, and elimination of the deficiencies of state procurement are the factors which can increase the security and regularity of production for both producers and society.

In consideration of the larger than average ratio of the older generation, the dropping out of the old will reduce the number and output of small producers at a higher rate in the future than until now, especially in the household plots. This cannot be fully counterbalanced either through incentives, or specialization, or the improvement of technologies. In general, the younger generation is not prepared to carry on production with the traditional peasant methods; further development of small-scale production can be expected of them only if they have the possibility to change from manual labour to machine work.

Specialization of production is concomitant with the increase and differentiation of incomes. Therefore, an appropriate method of income regulation has to be devised and made public. Higher consistency is to be asserted in the taxation of incomes. As a matter of fact, taxation of the sales returns does not take actual incomes for a basis, and thus distributes burdens disproportionately among the small producers.

So far it has been the integrating activity of large-scale farms that has proved to be the most efficient method of production organization. There are several signs to indicate that the course of development will take this direction. If large-scale farms duly keep in hand small-scale production and fit it into the large-scale framework, development will probably lead to the establishment of production relations similar to the industrial outworker system. In certain sectors, new forms of cooperative and small enterprises may come to the fore.

References

1. *A mezőgazdasági kistermelés I. 1981* (Agricultural small-scale production I 1981). Központi Statisztikai Hivatal, Budapest 1982.
2. *A mezőgazdasági kistermelés II. 1981* (Agricultural small-scale production II 1981). Központi Statisztikai Hivatal, Budapest 1983.
3. *Mezőgazdasági összeírás, 1981* (Agricultural census 1981). Központi Statisztikai Hivatal, Budapest 1982.

МЕЛКОЕ СЕЛЬСКОХОЗЯЙСТВЕННОЕ ПРОИЗВОДСТВО В ВЕНГРИИ

И. ОРОШ

Среднегодовые темпы прироста валовой продукции венгерского сельского хозяйства в 1970–1981 гг. составили 3 процента. Это развитие произошло прежде всего благодаря все более концентрирующемуся производству государственных хозяйств и сельскохозяйственных производственных кооперативов. Наряду с крупным производством возникла своеобразная форма мелкого сельскохозяйственного производства. В последнее десятилетие сложилось целесообразное разделение труда между крупным и мелким производством. Крупные хозяйства интегрируют также и деятельность мелких производителей и помогают им машинами, кормами и т. д. В мелком производстве принимают участие все слои общества, однако наиболее значительный объем производства приходится на приусадебные участки членов сельскохозяйственных производственных кооперативов.

Согласно проведенной в 1981 г. статистической переписи, 1,5 миллиона домашних хозяйств (42 процента населения) имеет в среднем 1500 кв. метров земельных угодий или более чем минимальное поголовье скота. Согласно переписи, они считаются мелкими производителями.

По сравнению с 1972 г. число мелких производителей уменьшилось на 11 процентов. Этой деятельностью занимаются большей частью люди пожилого возраста. Особенно много работают в мелком производстве пенсионеров.

Площадь земельных угодий мелких производителей сократилась, по сравнению с 1972 г., на 23 процента, но лишь на части их ведется крупное производство. Мелкие производители возделывают в основном земли, не пригодные для крупного производства, используют старые хозяйственные постройки и списанные крупными хозяйствами машины.

В 1981 г. мелкое производство дало 34 процента валовой продукции сельского хозяйства, причем в садоводстве и свиноводстве его доля превышала 50 процентов. 62 процента своей продукции мелкие производители сбывали на сторону, остальную же часть потребляли в своем домашнем хозяйстве. Эффективность их труда относительно низкая из-за большой доли ручного труда.

Благодаря деятельности крупных хозяйств по интегрированию мелкого производства и распространению контрактации производства мелкое производство становится более планомерным и складываются его новые формы.

В сельском хозяйстве большинства социалистических стран мелкое производство в отдельных отраслях дает значительную часть продукции.

В перспективе следует ожидать сокращения числа мелких производителей, в то же самое время специализация и концентрация их производства повысится.

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THE LONG-RUN DEVELOPMENT OF HUNGARIAN INDUSTRY (OUTLINES OF AN APPROACH TO INDUSTRIAL POLICY)

GY. VARGA

The study sets out from an evaluation of the present situation of Hungarian industry. It examines the weak points of industry. These are, among other things: the relatively large ratio of nonconvertible capacities, the emergence of so-called "technical islands", its high energy intensity, etc.

The author challenges the practice which hitherto based the industrial policy on the development of the branches of industry. He proposes to select so-called functional, innovation-technological priorities, that will promote the flexible adjustment of manufacturing, the reduction of capital intensity and the creation of conditions for a "market-oriented policy".

The author calls attention to the fact that planning has to reckon with an intricate web of factors of uncertainty. Therefore, on national economic level not the setting of individual concrete targets has to be aimed at, but rather the road leading to the main strategic objective, that is, the operational conditions of industry to be well elaborated.

Introductory remarks

Industry (including the food processing industry) plays a decisive role within the framework of the Hungarian economy. Its share in national income production amounts to almost 45 percent, and its contribution to GDP is 34 percent. 32 percent of all those in gainful employment are employed by industry. The contribution of industry to total commodity exports amounts to 89 percent (some 22 percent of total industrial sales are exported). The share of industry in Hungary's total investments amounts to 37 percent, and 53 percent of total electric energy consumption.

In the course of the 70-ies the improvement of productivity and international competitiveness of industry failed to keep up pace with international standards, thus Hungary's relative backwardness grew, and this tendency continued in the early 80-ies as well. In industry gross output grew by 4.6 percent (annual average) in the second half of the 70-ies. In 1980–83 the annual growth rate did not reach 2 percent.

In the course of the 50-ies the structure of industry basically shaped according to central state decisions. In the 60-ies central development programs concentrated on industrial sectors enjoying priority whilst in the 70-ies the production structure of Hungarian industry developed–at least to some degree–in conjunction with centrally launched development programs. It has to be admitted that the impact of the central programs of the 60-ies concerning some "priority" sectors is still felt.

Capacities established following central decisions in the first line met demand in

domestic and CMEA markets, however, due to changes which had taken place, some of the assumptions these decisions were based on failed to prove true even in respect of these markets. Central decisions were not always preceded by adequate examinations concerning international competitiveness and risks. The economic environment where these decisions were taken failed to force either state authorities or enterprises that were indirectly interested in development to carry out thorough examination of these factors, or to the adjustment or occasionally even to the cancelling of certain investment decisions if required by changed conditions. Partly as the consequence of the influence of central decisions on structural adjustments within the framework of industry technical islands came into being

- that can rely only to a limited extent on skills and know-how available in Hungary,
- that occasionally show a lack of and adequate production and infrastructural background,
- where the share of non-convertible capacities is relatively high.

In Hungary the importance of industries is relatively high that produce capital and energy intensive products of low added value. In 1982, calculated in gross production values, the contribution of metallurgy, electric power production and mining to total output amounted to 21 percent. These industries engage more than a third of the total productive fixed assets of industry. If one includes the heavy chemical industry as well then the share of industries producing basic materials within industry as such amounts to almost 30 percent, while engaging more than 40 percent of total fixed assets. An examination of state industry within total output, classified according to the field of utilization of products, shows that the share of energy carriers, industrial basic materials and semifinished products is more than 50 percent.

The process of canceling the production of obsolete goods and introducing new products is rather slow. The average life-cycle of products in industry is rather long, in the engineering industry it is more than 10 years, and in light industry it exceeds 11 years on average.

The participation of industry in the international division of labour is based on traditional trading forms. Complementary activities (research, production, etc.) based on specialization and coupled with the sharing of capital and risks, or the integration forces of different functions (e.g. marketing) that might diminish risks did not evolve. It appears to be certain that in the emergence of technical islands this circumstance plays an important role.

In the past the characteristic features of industry were determined basically by mass production of a medium level of development based on cheap raw materials and low wages, i.e. to a decisive degree by exports to the markets of the CMEA countries. However, this kind of advantage was exhausted in the course of the 70-ies. Exports to competitive markets with convertible currencies concentrate mainly on conventional products responding sensitively to the ups-and-downs of the trade cycle. The number of firm markets in such trade is somewhat limited, and this is especially risky under prevailing conditions. Manufacturing industry that had operated basically under monopoly conditions finds it especially difficult to cope with the requirements of competition on convertible currency markets. (Its difficulties are merely further enlarged by protectionism or discrimination.) The role of goodwill as a competition factor is unimportant, being a disadvantage in itself as well, but even more so for quality-sensitive goods.

The share of activities demanding low qualification and considerable physical effort is too high. In the ancillary processes both the number and the share of those doing an unskilled job and performing with low efficiency is extremely high. At the same time the share of *intellectual* products and services related directly to the production and marketing of goods as well as of those not linked directly to material production is rather low. In this sense as well, industry is too material intensive, and the scope of services of a software character is limited.

An adjustement on behalf of manufacturing industry to more advanced demand with higher requirements is hindered by a number of factors that are decisive from a strategic point of view.

This is due in the first place to the limited—and unjustifiedly limited—role played within total production by the intermediary (subcontracting) industries that are specialized and competitive in themselves. In the production of end-products structural adjustments are greatly hindered by this fact. Another structural disadvantage stemming from the same source is that there are no incentives and forces between intermediary and end-product production sectors mutually encouraging their activities. This could be one of the driving forces of technical progress in both sectors. The possibility of flexibility and innovation implied in technical progress within the intermediary, subcontracting industries, are wasted in practice. (Disregarding energy carriers, the imports of materials, semi-finished products and component-parts exceed by some 70 percent the exports of the same products.)

Second, within the production-technological patterns of industry the share of *non-, or only* partially *convertible,* i.e. *inflexible* capacities represents quite a large ratio. (Calculated on the basis of the gross value of fixed assets this is some 45 to 50 percent.) The same applies to mining, metallurgy, to electric power production, to the heavy chemical industry as well as to the majority of special production lines in the engineering industry. It is true that the conversion of technically determined capacities causes problems elsewhere as well, however, in industrialized countries being of the same size and level of development as Hungary, the share of such rigid capacities is smaller.

Third, the *over-centralization* of the *enterprise structure* in general hinders adjustment within industry. The fact is that as a consequence of the absence of a subcontracting sector, the position of large-scale industry is rather shaky, since it is not able to share the human and economic burdens of costs, technical and market adjustments with suppliers.

According to 1979 figures, the share of enterprises and industrial cooperatives employing at most 100 workers is only 10 percent, whilst economic units employing more than 1000 workers comprise 24 percent of all enterprises and industrial cooperatives. Among the 702 state industrial enterprises, there were only 36 where the work force was at most 50 persons. At 39 enterprises the size of the work force exceeded 5000 persons. This kind of industrial organization based one-sidedly on mammoth organisations is a perfect example of the misinterpretation of the character of modern production. It has to be admitted at the same time, that whilst on the one hand a flexible adjustment of industry is hindered by the over-centralization of the enterprises structure, on the other necessary concentration and vertical lines corresponding to international standards have not developed in all fields, where they would have been justified.

Fourth, the ability of adjustment of industry is impeded by the prevailing level of management and control, and by the totality of relevant human and material conditions. In this field the present pace of renewal is insufficient. The background of management (collecting of information, processing, analyzing and storing of information, primary communication conditions) are obsolete in a number of fields, and Hungary disposes of a limited number of management advisory institutions which only partially meet requirements. Under the prevailing system management functions are not granted a sufficiently high status, and a carreer in management is not sufficiently attractive to the talented.

Fifth, growing capital intensity is especially disadvantageous. Beyond the fact that all Hungarian investments are in themselves too expensive, the deterioration of the efficiency of invested assets experienced over recent years, could be explained by structural and marketing difficulties, and in this respect again by the relatively high share of nonconvertible capacities.

Some fundamental aspects of Hungarian history and developments, as well as certain decisive factors that had existed earlier and are independent of us are partially, but only partially, responsible for the prevailing state of industry.

In the emergence of the weak points outlined above the system of economic management, and therein the system of decision making have played the decisive role.

* * *

Structural adjustments having been initiated and still going on in the world economy; the slow rate of economic growth, increased uncertainties and other, non-economic factors with a disadvantageous effect on the Hungarian economy all imply the danger that–extrapolating the characteristic features of development–Hungarian industry might decline further from its current position, since its relative backwardness (both in the technical and in the economic sense) might grow further. International economic development also leads one to presume that

- the conditions of economic growth have changed in the countries of the CMEA as well. The resources of extensive (mostly quantitative) development have been exhausted, and a transfer to an intensive (qualitative) development course is already under way in these economies. The lasting recession in Western countries also affects socialist countries. As a consequence of both factors, the rate of economic growth has slowed down, the ability to accumulate has deteriorated, and there is therefore slackening demand in the investment markets. Under such conditions supply of a given structure may become depreciated and this may cause a further deterioration in the terms of trade. Thus problems of adjustment are timely in respect of the CMEA countries as well, and this has to be considered as a new strategic factor for the Hungarian industry;
- the structural and technical adjustment taking place even under conditions of recession in advanced Western countries, which are used as a tool for mastering the crisis (e.g. the widespread use of micro-electronics, biotechnology, space research, laser-technology, robotization, new tendencies in optics, as well as their new and unprecedented combination, e.g. bioelectronics, or the search for new materials, etc.) offer new resources for the improvement of competitiveness in the long-term

and at the same time change the structure and specialities of market demands. The trade war between advanced Western countries may force competing countries to accelerate technical progress and, especially in leading industries or activities new alliances, cooperation forms, new market and enterprise organization methods may develop in order to defend or even improve their position or bargaining power. Also due to these factors in world production and world trade the role of multi- and transnational corporations will grow further. All this implies the risk for Hungarian industry that it will not be able to take advantage of extended sales and cooperation opportunities at a time of economic boom in Western countries, since structural and technical differences between the Hungarian and the Western industries will become insurmountable. After a certain time, structural and technical asymmetry may become an obstacle when including "quality" products and technologies into production and in commercial relations of a complementary character;

– developing countries (at least some of them), in the case of an economic boom, may be a serious competition given the prevailing pattern of Hungarian industrial goods. What is more, as a result of capital, technology and management transfer taking place as a consequence of structural re-adjustment and technical progress they may gain competitive advantages against Hungarian industry in a number of manufacturing industries. This will be greatly fostered by more favourable conditions for entering markets that will be available to them.

A summary of the weak and vulnerable points of industry is necessary for an outline of an industrial strategy. A critical self-examination is the starting point for every kind of plan, development policy or strategy, since it reveals where blind alleys are, where reserves are hidden, and where the situation must be changed.

Outlines of a strategy

The possibilities of economic growth of the Hungarian economy depend in the first place on the development prospects and on the structural adjustment of industry. Industry has an indirect influence on the whole of the economy, skilled labour can be used in this field, in the most favourable way, Hungary may participate in the international division of labour most intensively via industry, and industry is one of the most dynamic factors of world trade.

The above diagnosis refers to the fact that the current development strategy of industry, has to be thoroughly reevaluated and changed. The new strategy, in conjunction with priorities set by economic policy,–has the aim of *safeguarding the relative international competitiveness of manufacturing industry and of preserving or improving comparative positions.* This requirement places the improvement of economic efficiency and marketability at the centre of the new strategy. This can be achieved via a basically export-oriented development policy that relies to a greater extent on the domestic market, assuming rational import substitution. The raising of economic efficiency and the improvement of international competitiveness are conditions of the restoration of external equilibrium and the acceleration of industrial growth.

Experience gained in the course of the formulation and implementation of industrial policy in the past, as well as the prevailing situation and the foreseeable future warn against the working out of an industrial policy that aims at the establishment of some "optimal" structure or at the achievement of some "optimal" rate of growth. Especially in countries with an open economy an industrial policy that depends on the traditional planning approach, implies great risks. The earlier planning practice failed since

- economic plans contained too many and not sufficiently well founded priorities,
- resources were scattered whilst planning in order to correct disproportions, was forced from time to time to a sudden development or reconstruction of "backward" industries or parts of them,
- it prevented or hindered the establishment and evolution of activities and ventures that should have been created by the cooperation of combination of individual industries. That is, structural policy based on sectors or sub-sectors was mostly coupled with a rigid implementation method.

It is more suitable and less risky to establish a system of targets of industrial development that concentrate on given development, and basic technology projects. National economic planning has to aim at the realization of strategic goals that have an accelerating impact in a stagnating economy which was grown slowly for years, in a way that they contribute directly and indirectly to the raising of productivity and economic efficiency as well as to the improvement of competitiveness in the whole economy (i.e. in material production as well as in the infrastructure). Thus they explore new factors of economic growth. Finally, an important criterion of the selection of priorities is that they should improve the technical and technological flexibility of industry and expand the possibilities of convertibility.

I consider *functional priorities* the most suitable for such purposes. There would be objectives that would greatly contribute, in the first place in industry but in other economic sectors as well, to the raising of productivity and efficiency and to the improvement of international competitiveness. Such functional priorities are

- the spreading of electronics in production and in management technology, that is the acceleration of automatization and miniaturization,
- the mechanization of administration technology, and the implementation of electronization in this respect,
- the development and wide-spread utilization of modern chemical processes and methods (e.g. the manufacturing of clean or super-clean materials for the pharmaceutical industry or for telecommunications technology, the wide-spread utilization of plastics, etc.)
- the development and spreading of processes serving a rational material and energy consumption,
- the foundation and implementation of bio-technics in certain fields of agriculture and pharmaceuticals.

Besides functional priorities national economic planning should concentrate on certain *innovation or technology blocks* as well. E.g. blocks related to

- food production and the food supply,
- public health
- measuring and material examination procedures
- transmission technology
- and to "subcontracting" industries.

The two aspects of this double approach to economic policy priorities does not contradict but rather mutually assumes one another. Functional priorities concern in the first place technological trends of outstanding importance from the point of view of the future and innovation blocks concentrate on areas where—under prevailing domestic conditions—the achievements of technical progress may be most economically utilized.

The scope of priorities, as well as their depth or the pace of their implementation can be altered according to the availability of necessary resources. These priorities can only be enforced if an increased selectivity is shown in the coming two decades and engaged resources are re-allocated.

While enforcing an increased selectivity the importance of material and energy intensive basic material industries requiring substantial capital should be curtailed. In these industries—and this applies in the first line to metallurgy and the heavy chemical industry—the level of processing of products must be raised, and their quality improved (quality compound steel, plastic end-products, etc.). In the energy sector—one should rely on domestic resources to a rational degree in the interests of a safe supply. In order to reduce oil consumption a change to energy derived from gas, coal, geothermic energy, from waste materials of agricultural and forestry origin, has to be carried out. (Within total energy consumption the share of oil products fell from 40.7 percent in 1978 to 32.7 percent by mid-1983.)

The share of energy production of total investment resources has to be decreased in the first place by the reduction of the energy elasticity coefficient of the economy to 0.4 or 0.5. (This ratio was well above 1.0 in the 70-ies.)

The prevailing stagnation in manufacturing industry can be overcome only if those activities (in certain cases whole enterprises or plants) are closed down where production leads to lasting losses (which are not due to central decisions). The curtailment of such activities is a function of the improvement of exportability since these eliminated activities have to be substituted by imports. However, resources becoming free as a result of the stopping of unprofitable activities, can be allocated for the improvement of the export of profitable or at least potentially profitable activities.

This liquidation is not only coupled with the freeing of resources but with a one-time capital loss or with additional investments as well. (E.g. costs of re-training of the workforce.) The richer a country is, the more it manages to cope with such losses, consequently in more wealthy countries that active capital that can be operated only at a loss is sacrificed more easily.

Due to considerations related to the ups-and-downs of the economic cycle, it is sometimes right to make possible the survival of industrial activities that suffer from temporary difficulties.

In the selection of priorities investments should be carried out in areas where capital demand is relatively low, where no large capital concentration was necessary and the rate of return is also not too slow. The majority of the appointed areas are of a kind where the technically determined minimal size of investments is not coupled with the requirement of large capital concentration. Naturally, this does not mean that the implementation of one or the other priority projects does not demand large capital investments, especially in research and development. However, these priorities are of a character permitting the development of a relatively narrow part of the area concerned as well.

All this assumes that strategy goals implied in industrial policy can be based not only on large enterprises, partly on smaller undertakings as well. This means at the same time that the complexity of blocks belonging to these priority projects will vary in line with available resources and the development of comparative positions. Thus according to my approach this block concept means a multisided development and market policy that assumes the joining of research, production and marketing that is the most advantageous from the point of view of Hungary.

An indispensable condition of the creation of a rational structure in this sense, is the gradual establishment, and later the expansion, of the conditions of *competitive imports*, especially in the conventional manufacturing industry. This does not contradict the temporary defence of the new embryonic industrial activities that should be implemented by tariff policy.

These selected priorities make possible that

- in some areas Hungary may manage to offer a performance corresponding to peak-level technology, or at least approaching it,
- that over a wide-range a follow-up strategy may be enforced,
- Hungary may enter the market with some specialities,
- Hungary may join the activities of foreign enterprises implementing advanced technologies either as a supplier or as a partner, she may participate (by offering technical or intellectual services) in the mastering of global or regional tasks such as the safeguarding of water and the soil, the improvement of public health, etc.

A combination of different strategies may from time to time prefer or pushed to the background one or the other alternative. These strategic alternatives and their combinations play an important role in the realization of development policy priorities.

However, the recognition of the technology-innovation key-areas marked as examples does not promise even coming close to the level of advanced industrialized countries in the planning period. Our achieved level of development in a wider sense has to be regarded as a given condition that to a great extent influences the chance to enforce priorities in the implementation of Hungarian industrial policy.

This way of target definition does not eliminate all uncertainties. However, it seems to be likely that it will better serve raising of efficiency and improvements in flexibility, and may facilitate the withdrawing of capital from some areas, thus diminishing: risks at the macro level, than the earlier structural policy based on sectoral principles did.

Taking into consideration the limited availability of intellectual capacities and development resources, Hungarian industry will probably be able to reach, or at least approach, peak-level technology only in exceptional cases. However, at the level of a medium-size development and with given resources efforts have to be made for the development of certain Hungarian *specialities* and for the establishment of a *good, reliable supplier (subcontractor) position.*

It is emphasized almost axiomatically that it is advantageous for the national economy if the share of products and services containing highly qualified labour increases within industry. At the same time in a number of fields economic efficiency deteriorates in line with the increase in the level of processing or in the elaborateness of the products. The reason for this is that in these categories we are not able to offer the quality, the performance, the reliability, the services, the fashionableness, the packaging that is expected by the market. Since with the increase of the grade of manufacturing these goodwill factors affect prices at an increasing extent, our disadvantage will grow especially in the case of products demanding high-level intellectual input that, responding sensitively to changes in quality, and fashion or which are related to servicing.

However, I do not wish to suggest that then we should rather prefer the development of mass production based on unskilled labour, but all the more that in the decade ahead of us, we should pursue a development policy on the basis of which market goodwill can be established.

In this respect I see a possibility for progress in the production of modern binding elements, component-parts, spare-parts or of highly cleaned materials, in the development of their production methods as well as in an up-to-date infrastructure. This may render the narrowing of the technological gap possible. The other possibility is the establishment of different intellectual services (in the first place in engineering). Both ways of development would improve the performance of industry and thus its market position.

In another way of looking at things: progress in the fields outlined above is a condition for being able to enter the market with new products and innovations. (Unfortunately, at present we have no, or only few industrial products of services that could not be easily replaced or dispensed with by the buyer.) It is necessary to create activities which could become demanded in the market due to their novelty, and their price would not be the *most important* competition factor. Novelties or specialities do not always assume outstandingly new solutions either in technology, or in the product itself, but they could be a combination of already existing and known methods and component-parts, that, however, meet quite new requirements. There are favourable possibilities in this respect in the application technology based on electronics, in the public health block, in food production, etc.

The above is connected with other market policy considerations as well. It is thus suitable to pursue a *"niche-policy"* in certain manufacturing industries. This would implies in addition to a market share strategy related to mass production another market policy either supporting it or providing an alternative. This niche-policy would be mostly linked to novelties or specialities. To find or to create market-niches is only possible with

some special product or service. Possibility are present even in conventional industrial activities.

It is sound to combine a pioneering and a follow-up policy in respect of developments. The same applies to market policy, where it is wise to combine a market share policy (contributing to the expansion of volume) with a niche-policy. In the selection of the adequate market policy differing trade costs related to the entering of a market, or to the maintenance of the market share or to the expansion of the latter, have to be carefully estimated. In certain sub-sectors these costs are substantial. Consequently, a realizable and realistic market policy influences production policies as well as comparative positions in the production sector, and may even alter them.

Thus, selected directions (priorities) of development

- improve the flexibility of industry,
- are relatively less material and energy intensive, they thus improve the character of our import dependence,
- may contribute to the improvement of our market positions in CMEA countries (especially via the supply of products made by the subcontracting industries which are the cause of bottlenecks, anyway, and of more up-to-date products and services),
- may contribute to the improvement of market positions in advanced Western countries as suppliers and as the representatives of a peculiar "Hungarian product pattern". Western exports which at present show considerable concentration and consequently are risky may be diversified,
- in respect of developing countries they may promote the export of systems related to Hungarian services in engineering and management, backed up in other ways as well.

The principle market for the Hungarian industrial products is the Soviet Union. Thus a Hungarian development policy must reckon with Soviet plans concerning economic development, examining those projects that hold out the promise for the Hungarian industry, that they may contribute to the improvement of the terms of trade of Hungary. E.g. long-range programs concerning transport and delivery of goods, or that of food production, as well as plans aimed at the promotion of energy and material conservation provide new market opportunities for Hungarian industry. In general the aim must be that deliveries of energy carriers and raw materials be counterbalanced to an increasing extent by manufactured goods that are attractive for the Soviet trading partner (especially by up-to-date products of the engineering industry). However, it may be assumed that with its present range, engineering will be less in the position to balance Soviet deliveries in the future than it was in the past. Consequently, the rate of growth of the engineering industry will slow down due to this reason as well.

Besides the Soviet Union as a principal market, it is necessary to pay an increased attention to different forms of cooperation with the smaller CMEA countries. The possibility for this is given by their geographic proximity, by the similarities of size sensitivity and by the similar level of industrial development of these countries. This may

be fostered via increasing the share of specialities in the Hungarian product pattern. The possibilities of economic growth, and the structure of supply of the member countries of the CMEA justifies a new approach for capital investment and technical determination in Hungarian industrial development policy.

The precondition for the implementation of an industrial policy

The strategic goals of industry can only be achieved by basic changes in the conditions of its functioning. The principle industrial policy objective and subordinated priorities can only be realized if new driving forces, mechanisms and behaviour patterns are enforced. *If in this respect basic changes are not carried out, one cannot reckon with improvements in the efficiency of industry and in its international competitiveness.*

Within the strategic period one has to reckon with unforeseeable changes as well that may lead to changes of individual targets or may open new possibilities for Hungary. Thus in Hungarian industrial policy a primary role has to be attached to the creation of a system of conditions that increasing flexibility of adjustment (i.e. against the working out of a detailed system of development goals). In this respect, substantial progress has to be made already by 1985.

The development of industry and especially that of manufacturing industry demands *competitive market conditions* where the majority of structural changes take place in the form of real business undertakings. A condition for this is that the dependence of enterprise management on state economic authorities be substantially reduced, and its responsibility towards the whole enterprise collective be increased.

Thus the readjustment of the operative conditions of industry has to be in the centre of industrial policy of the 80-ies.

According to international experience, there is a powerful correlation between competitive conditions forcing adjustment and the development of activities within the industrial structure, demanding skilled labour and producing greater value added. Production and other kinds of specialization, subcontracting industries able to adjust efficiently and flexibly will develop only under competitive conditions, i.e. under conditions responding to the impacts of market selection. The organisatory and controlling activity of the state affecting the economy has to be complimented by the disciplinary force of the market, since it can only become really efficient in this way.

The international competitiveness of industry and the behaviour of the members of the economy on international markets are greatly influenced by the conditions under which this activity is performed, to what extent they force and encourage a competitive attitude. The hardening of domestic market conditions, the improvement of the equilibrium position as well as the modernization of the system of economic management may encourage domestic producers and buyers to improve their performance, and all this could contribute to the improvement of the international market position of industry.

As regards the prevailing conditions in industry it has been found that one of the

characteristic features of its activity is the wasting of resources. This can only be eliminated if basic changes take place, if economic organizations become interested in the augmentation of the part of national capital entrusted to them, being ready to bear the consequences and risks of their decisions, reckoning even with the possibility of bankruptcy, i.e. if economic organizations at least become real entrepreneurs. Under such conditions there are better chances for performance and for encouraging creative activities. Experience so far in the course of industrial development shows that the organizatory and disciplinary force of the market cannot be substituted for by any kind of administrative or artificially created regulatory instruments.

Among the conditions and methods of an industrial policy in a narrow sense the conditions for the mobility of economic organizations are particularly important. The natural conditions of foundation and bankruptcy, i.e. those subordinated to economic and market influences, should be established in the first place in industry, and especially in manufacturing industry. An interest in founding new ventures or that in withdrawing capital could probably be increased via allowing a *horizontal flow of capital* (i.e. the gradual establishment of the institutional conditions of a capital market) and thus the elimination of "frozen" investments. This kind of encouragement of organizational mobility could contribute as well to the improvement of size ratios within the enterprise sector. The initiating of certain ventures, especially of those demanding a large starting capital, cannot be left exclusively to the market mechanism. The state may initiate risky ventures of outstanding importance for industrial policy via monetary institutions. By contributing capital to ventures, together with other enterprises, it may participate in undertakings promising a return only a long run..

The improvement of the size ratios in the enterprise sector may contribute to

- the establishment of a market equilibrium and to the creation of competition, and to encouraging the latter,
- the encouraging of innovation activities,
- the re-employment of labour that becomes free due to the elimination of unprofitable activities,
- the implementation of less capital intensive methods of development,
- the reduction of overhead costs of enterprises,
- the training of more entrepreneur-type managers,
- the improvement of the flexibility of large enterprises.

The prevailing organizational system of enterprises has to be adjusted to strategic goals. This means in the first place that research, development, production and marketing have to be formed into a chain.

The introduction of a *uniform tax-system* is necessary that does not basically re-group incomes. A considerable part of tax-revenues should be switched from the phase of production to that of end-uses, and the system of profit taxes, turnover taxes and personal income taxation have to be coordinated accordingly.

In the interest of the rational evaluation, replacement and combination of resources (i.e. labour and capital) the relative burdens affecting labour have to be raised within the

frame of the tax-system. At the same time it would be advisable to reduce the rate of profit-taxes, thus diminishing the tax burdens affecting accumulation and investments. It could thus be achieved that the proportions of available resources better reflect differences in the primary income of enterprises.

This kind of a reshaping of the tax-system may increase the profit-sensitiveness of industrial enterprises and at the same time had to greater income differentiation among enterprises.

The information flow as well as the processing, storing and analyzing methods of information in respect of enterprises have to be improved. Improvements in the ability of enterprises to respond to information, and thus the improvement of their flexibility and their decision-making require the modernization of decision-making and interest relations within enterprises. In general it is necessary that the individual plants of enterprises be directly influenced by the impact of the market, and within a determined range dispose of an independent authority in decision-making.

The implementation of objectives in industrial development assumes the modernization of training methods. The teaching of convertible knowledge should be the aim, thinking in alternatives should be developed as well as the readiness and ability for decision-making. The teaching of foreign languages has to be made more successful as well. Familiarity with new techniques and their socio-economic impact, especially knowledge of computer techniques and being able to exploit computers should become an organic part of the Hungarian school-system. Acquaintance with these activities–just approaching the problem in market terms–is a competitive factor and will be one in the future even more so. In the training of technical experts a greater importance should be attached to thinking in social, economic and market terms. Last but not least the number of experts (both economic and technical) trained abroad and with experience there, should be increased.

Standards of *management culture* have to be raised considerably and the system of selecting managers has to be improved. Competition and mobility among managers should be encouraged. It has to be made possible for enterprises and cooperatives themselves to compete with each other for obtaining the best possible men. The social prestige of the managerial function has to be improved, by making information on the activity of the enterprises available. The evaluation of the activity of senior managers has to be made easier. Finally, the infrastructure of the manager and entrepreneur functions has to be established (i.e. advisory networks concerning management, planning, taxation, legal problems, etc.).

The increased mobility in the flow of assets and of organization inevitably assumes *a greater mobility of labour.* The social and institutional conditions for this, including necessary financial resources, have to be provided for both regionally and within the framework of the individual enterprises as well. Intra-enterprise mobility has to be encouraged as well, thus encouraging the learning of new skills and the development of new or unexplored abilities. (The retraining grants were introduced in mid-1983.)

In the implementation of development priorities of industrial policy, in contrast

with the practice pursued so far, central planning has to concentrate in the first place on the creation of adequate social and economic conditions. The importance of state control of and influence on technical development deserves particular attention. The system of instrumentalities (ranging from fringe benefits, via a preference system operating as a mechanism, to tariff policy) has to be established in a way that the realization of technical development objectives of strategic importance that are socially necessary, be not hindered by market risks or by the insufficiency of enterprise capital. In the competitive sector of industry in particular subsidies to be repaid and refunds on incomes (i.e. tax-refunds) may play an important role. Preferences and subsidies should be transferred from production to the sphere of technical development.

Under the given framework of economic management the development of industry may be influenced by the state via placing orders, and making capital available as well as via restrictions and standards concerning environmental protection, public health, security, etc. As regards the latter, they have to be revised from time to time, since their renewal may affect competitiveness. These restrictions affect the marketability of the processed products of procedures as well.

Primary interests are connected with a reduction in the demand for assets. This can be served in the course of the strategic period by

- the growth in the share of investments providing a quick return and requiring moderate assets concentration,
- withdrawing and re-allocating assets on the basis of efficiency considerations,
- the concentration of activities on more up-to-date machines and equipment of higher productivity,
- the creation of specialized organizations in the subcontracting industry with the aim of modernizing maintenance and renewal activities related to machines and equipment,
- the improvement of the utilization of machines and equipment, (due to social considerations there is only a limited possibility for the expansion of shift-work. Thus probably such technical solutions will be preferred that are able to minimize the additional labour demands of shift work.)
- the completion of investments within a shorter time and of a better quality and the establishment of engineering activities that contribute to the shortening of the time of introduction and extension of new technologies (or capacities).

There are substantial reserves in certain manufacturing industries. The utilization of machines and equipment of great productivity could be substantially increased as a result of relatively small additional investment. At the same time, in certain industries and in respect of certain technologies (e.g. in material handling or in the end-phases of production, e.g. in packaging) under-development occurred.

Both the technical renewal and the market prospects of manufacturing industry are greatly influenced by its participation in the international division of labour.

The ability to adjust of Hungarian industry is limited not only by already outlined institutional, interest and structural factors, but by the fact as well that it does not

participate organically in the international division of industrial labour. Hungarian enterprises are *national* ventures. In respect of research and development, production and productive services as well as of the sharing of market risks industry relies almost exclusively on national resources. In this sense industry may not be regarded as an "open", but as a rather "closed" economy. This is even strengthened on the side of resources by the limited choices available to enterprises. The outlined functional priorities give better chances for joining in the international division of labour than conventional sectoral development targets, however, at the same time the realization of these functional priorities is also subordinated to an increased participation in the international division of labour. In general, in small countries like Hungary, high technology activities and special national product patterns may only evolve and become competitive if they develop as *integrated in the world economy.* This is the explanation for the fact why small but economically advanced countries with narrow domestic markets and relatively limited resources could become competitive. In the absence of integration with the world economy these high technology activities cannot evolve, or else efforts made in the interest of their established will not proportionate with results.

Nowadays technology, capital and management transfers are interwoven. An indispensable condition for the preserving or improving the relative competitiveness of manufacturing industry of middle-developed small countries, is a reliance on additional production factors. Thus one should provide the conditions so that

- Hungarian industry may take advantage of direct capital and technology and management transfer,
- Hungarian industry be also able to export activities to other countries improving its comparative positions.

It would be necessary to internationalize Hungarian enterprises of relative importance in international markets which have already established a certain image so that they can take advantage not only of possibilities implied in material production but in those offered by international capital and money markets. (The bargaining position and competitiveness of transnational corporations is not only strengthened by the fact that they produce more efficiently than Hungarian enterprises but by the fact as well that they are directly affected by the international money market, and may take advantage of exchange rate differences being in a position to share their risks geographically as well.) Thus the advantages of transnational corporations are not only due to their size but in the first place to their character.

Production is relatively stronger in Hungarian industry than marketing. Thus cooperation with firms or enterprises may lead to mutual advantages, where in the interest of introducing relatively up-to-date Hungarian products (e.g. pharmaceuticals) a joint venture is founded. Real cooperation is based on the sharing of capital and risks.

However, it would be a mistake to attach too great expectations to the readiness of Western companies concerning cooperation. Their scope of decision making is already limited by a number of state or even international restrictions (i.e. COCOM-list, regional and national protectionist measures, etc.). Their interest in cooperation will be influenced

by the ups-and-downs of the economic cycle as well. However, it would also be a mistake to underestimate the possiblities of cooperation, especially in the long-run. This is proved by the fact as well, that cooperation based on genuine mutual advantage and on the mutual sharing of risks is still very much alive.

Industry has to be able to make offers on competitive markets corresponding to the requirements of competition. What I have in mind in the first place is the participation in tenders by international monetary institutions (like the World Bank) or by the governments of developing countries, as well as the foundation of joint ventures.

In respect of CMEA countries, in addition to conventional cooperation based on the inter-sectoral division of labour, the division of labour within industries of smaller division still (intra-sectoral), based on real production specialization has to be aimed at, as well as the foundation of joint ventures, if possible not demanding large capital investments. The advantage of this kind of venture lies in the high degree of specialization, in the relatively quick return on invested capital, and in the fact that mutual interests are clearly recognizable and risks may be shared.

The possibilities of venture triangles based on the raw material resources of the CMEA countries, and on Hungarian skilled labour, as well as partly on Western capital (or technology), have to be investigated. The condition for involving Western direct capital investment (or technology) is to offer attractive business prospects. The CMEA market offers such possibilities raw material resources in addition to. For Hungary a venture is considered advantageous if, besides sales to Western markets, the product is regarded as convertible by the CMEA partner as well, and delivery costs, the Hungarian wage level or other factors, make participation in a joint venture more advantageous than simple import against convertible currencies. Hungarian enterprises should be encouraged to carry out market research for the establishment of such triangles, or investigate the possibilities of joining such ventures, provided a mutually advantageous way of accounting may be developed.

A basic condition of the implementation of objectives set by industrial development policy is to make the intentions of state economic management better calculable and foreseeable. Consultations between state authorities and enterprises should become more regular and the readiness to cooperate should be increased.

Whilst the implementation of the industrial policy outlined above may the elimination of certain unfavourable phenomena and processes experienced earlier, it may give rise to the emergence of contradictions as well that have not been reckoned with so far. For example the acceleration mechanism of the market, the emergence of the different types of venture forms, the increase of income differences, etc. may initiate such new social and economic processes that may partly rearrange interest relations as well. The first signs could be experienced already in the early 80-ies. However, the realities of economic life justify only the judgement that this is the economic-strategy alternative that permits the elimination of factors hindering economic development and adjustment, making possible the exploration of new driving forces, requiring the smallest possible (i.e. still bearable) sacrifices.

1. Structure of industry

Branch	*By gross production value* (percent)*		Change between 1980–82	*By the number of persons employed* (percent)*		Change between 1980–82	*By gross value of productive fixed assets* (percent)*		Change between 1980–82
	1980	1982		1980	1982		1980 12.31.	1982	
Mining	6.3	7.4	1.17	7.1	7.3	1.03	8.1	8.8	1.09
Electric energy industry	4.3	5.0	1.16	2.2	2.3	1.05	14.8	14.6	0.99
Metallurgy	9.9	8.6	0.87	5.9	5.7	0.97	9.5	10.1	1.06
Engineering industries	22.9	23.1	1.01	32.1	32.3	1.01	18.6	18.7	1.01
Building materials industry	3.3	3.3	1.00	4.9	4.8	0.98	7.0	6.6	0.94
Chemical industry	19.1	20.5	1.07	6.8	7.0	1.03	16.3	15.6	0.96
Heavy industry total	*65.8*	*67.9*	*1.03*	*59.0*	*59.4*	*1.01*	*74.3*	*74.4*	*1.00*
Wood processing industry	2.2	1.7	0.77	3.0	2.6	0.87	1.4	1.2	0.86
Paper industry	1.3	1.3	1.00	0.9	1.0	1.11	1.9	1.7	0.89
Printing	0.9	1.0	1.11	1.2	1.2	1.00	1.3	1.3	1.00
Textile industry	4.8	4.3	0.90	7.4	7.3	0.99	5.2	4.9	0.94
Leather, fur and shoe industry	2.3	2.1	0.91	3.7	3.8	1.03	1.1	1.1	1.00
Clothing industry	1.8	1.6	0.89	4.8	4.7	0.98	0.7	0.7	1.00
Handicrafts and home crafts	0.9	0.8	0.89	4.3	4.0	0.93	0.3	0.3	1.00
Light industry total	*14.2*	*12.8*	*0.90*	*25.5*	*24.8*	*0.97*	*11.9*	*11.2*	*0.94*
Miscellaneous industry	*1.4*	*1.3*	*0.93*	*3.4*	*3.3*	*0.97*	*1.1*	*1.0*	*0.91*
Food processing industry	*18.6*	*18.0*	*0.97*	*12.2*	*12.6*	*1.03*	*12.7*	*13.4*	*1.06*
Total	100.0	100.0	1.00	100.0	100.0	1.00	100.0	100.0	1.00

*Calculated at current prices.

2. *Structure of state industry by commodity groups*
percent

Commodity groups	1980	1982	Change between 1980–82
Mining and electric energy products	18.1	17.9	0.99
Industrial materials and semifinished products	35.4	35.3	1.00
of which:			
Metallurgical products	9.9	10.4	1.05
Engineering industry products	4.7	4.6	0.98
Chemical industry products	6.3	6.6	1.05
Textile industry products	6.2	5.7	0.92
Building materials	5.3	4.9	0.92
Capital goods	19.3	20.5	1.06
of which:			
Machinery and equipment	6.9	6.6	0.96
Vehicles	5.7	6.0	1.05
Consumer goods	13.2	12.5	0.95
of which:			
Durables	5.3	5.0	0.94
Clothing	4.4	4.1	0.93
Processed food	8.7	8.9	1.02
Total	100.0	100.0	1.00

3. Commodity structure of industrial exports by groups of countries (percent)
1982

Commodity groups	Socialist countries	Non socialist countries	Total export
Products of metallurgy	3.9	10.6	6.8
of which:			
Products of ferrous metallurgy	1.6	6.6	3.8
Products of the engineering industries	50.8	28.2	40.9
of which:			
Products of the motor vehicle industry	18.3	4.7	12.3
Products of telecommunication and vacuum engineering	8.1	4.1	6.3
Iron and metal mass products	1.3	1.5	1.4
Chemicals	12.8	17.3	14.7
of which:			
Organic and inorganic chemical products	2.0	2.8	2.4
Pharmaceuticals	4.8	3.7	4.3
Other heavy industry products	2.0	13.2	7.0
Heavy industry products	*69.5*	*69.3*	*69.4*
Light industry products	*11.2*	*12.8*	*11.9*
of which:			
Products of the wood processing industry	0.7	1.6	1.1
Products of the textile industry	4.3	4.1	4.2
Products of the clothing industry	2.4	4.1	3.2
Products of the leather, fur and shoe industry	3.2	2.2	2.8
Other industrial products	*0.6*	*0.8*	*0.7*
Food processing	*18.7*	*17.1*	*18.0*
of which:			
Meat products	5.5	5.0	5.3
Canned products	3.5	3.6	3.5
Total	100.0	100.0	1.00

*4. Percentage distribution of energy production and imports**
percent

Energy products	1980	1982
Coal	28.8	28.8
Hydrocarbons	63.6	60.8
of which:		
Crude petroleum and related products	37.4	33.6
Natural gas	26.2	27.2
Other fuels	7.6	10.4
Total	100.0	100.0

*On the basis of calorific value.

5. Size groups of state enterprises by number of manual workers
1979

Size groups	Number of enterprises total	Percentage distribution of		
		Number of enterpr.	Gross value	Manual workers
Maximum 50	36	5.1	–0.4	0.1
51–100	14	2.0	0.3	0.1
101–300	95	13.5	1.8	1.7
301–500	95	13.5	2.9	3.5
501–1000	148	21.1	12.5	9.8
1001–2000	146	20.8	19.7	18.1
2001–5000	129	18.4	36.8	34.9
5001–10000	25	3.6	12.5	14.4
more than 10000	14	2.0	13.9	17.4
Total	702	100.0	100.0	100.0

6. Size groups of state enterprises and industrial cooperatives by the number of manual workers
1979

Branch	Percentage of enterprises and cooperatives employing				Total
	Maximum 100	101–500	501–1000	More than 1000	
	manual workers				
Mining	12.0	12.0	8.0	68.0	100.0
Electric energy industry	–	22.7	31.8	45.5	100.0
Metallurgy	10.0	16.6	13.3	60.1	100.0
Engineering industries	3.2	20.0	9.0	67.8	100.0
Building material industry	6.2	31.3	6.3	56.2	100.0
Chemical industry	13.0	20.4	14.8	51.8	100.0
Light industry	5.0	33.0	20.9	41.1	100.0
Miscellaneous industry	2.5	82.5	5.0	10.0	100.0
Food processing industry	11.3	21.5	40.9	26.3	100.0
State industry	*7.1*	*27.0*	*21.1*	*44.8*	*100.0*
Cooperatives total	*13.4*	*75.1*	*9.0*	*2.5*	*100.0*
Industry total	*10.2*	*50.5*	*15.2*	*24.1*	*100.0*

ДОЛГОСРОЧНОЕ РАЗВИТИЕ ВЕНГЕРСКОЙ ПРОМЫШЛЕННОСТИ

(ВАРИАНТ ПОДХОДА К ПРОМЫШЛЕННОЙ ПОЛИТИКЕ)

Д. ВАРГА

Промышленность играет решающую роль в венгерском народном хозяйстве. Ее доля в производстве национального дохода составляет 45 процентов, а в ВНП — 34 процента. В статье дается критический анализ развития промышленности за последние два десятилетия и указываются на слабые моменты. Нынешняя структура промышленности является капитало- и энергоемкой, относительно высока доля промышленных отраслей и продукции, в которых низка добавленная стоимость. В государственном секторе промышленности доля энергоносителей, основных промышленных материалов и полуфабрикатов превышает 50 процентов. Государственные решения по развитию привели к образованию т. н. технологических островков, не имеющих достаточной отечественной базы НИОКР. Сборочно-монтажная обрабатывающая промышленность в большой степени зависит от импорта деталей и узлов, так как отечественные поставщики отстали в своем развитии от производства конечной продукции. Слишком велика доля работ, требующих низкой квалификации, но больших физических усилий, особенно в обслуживающих процессах. Способность промышленности к приспособлению снижается тем, что в ее производственно-технической структуре относительно велика (около 45 процентов) доля неконвертируемых или лишь частично конвертируе-

мых, т. е. негибких мощностей. Приспособление затрудняется слишком централизованной структурой предприятия, а также современным уровнем культуры руководства и управления. Исходя из изменений на отечественном и зарубежном рынке промышленных изделий, автор указывает, что стратегия венгерской промышленности должна быть нацелена на сохранение и возможное улучшение ее конкурентоспособности и сравнительных преимуществ на международном рынке.

Статья отвергает предпочтения промышленной политики, основанные на традиционном отраслевом принципе, и вместо них предлагает разработку таких целей, которые способствовали бы повышению производительности и эффективности, а также рыночной конкурентоспособности как в промышленности так и в народном хозяйстве в целом. Эти т. н. функциональные предпочтения должны нацеливаться на такие технологические узловые моменты, как создание предпосылок для электронизации и применения биотехники, разработки технологий, служащих рациональному использованию материалов и энергии.

В заключительной части статьи рассматриваются условия проведения промышленной политики. Показываются те области, в развитии которых целесообразно сохранить активное участие государства и даже усилить его. Однако указывается, что развитие промышленности, и, в первую очередь обрабатывающей промышленности, требует усиления влияния рынка, наличия таких условий, в которых большая часть структурных изменений происходит в форме предпринимательства.

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THE ENTERPRISE CRISIS

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The enterprise crisis in the Hungarian industry may be described by a special syndrome. The present article, based on an analysis of enterprise crises that took place in the 1960s and 1970s, considers sales difficulties as the most important element in the antecedents of the specific state in question. The Hungarian enterprises strictly insist on retaining the production factors and they cannot and will not apply the means used for averting crises in the capitalist economies. Instead of dismissing labour, or selling fixed capital, often the range of products is enlarged. It is in the course of this special kind of diversification that the real crisis of the enterprise emerges which will then intensify the forces acting towards efforts at solving the difficulties through centralization.

The Hungarian enterprises joining the international division of labour often point it out to the Western partner as an advantage that in a planned economy enterprises do not get into crises nor do they go bankrupt and, therefore, no obstacles stand in the way of building up long-term and smooth enterprise relations with Hungary. Although this advantage may be proved theoretically, very often it cannot be exploited. Therefore, the subject-matter of the present article, the crisis of the Hungarian industrial enterprises can be considered a microeconomic phenomenon which reduces the efficiency of Hungary's joining in the international division of labour.

The curves representing the number of enterprises and the frequency of winding-ups and mergers changed their course–at least since the early 1960s–at the time of central economic policy decisions of great portent (1968, 1972 and 1978). And yet it is not exclusively the centrally decided mergers that account for the reduction in the number of the state-owned and cooperative industrial enterprises or for the fluctuations in this reduction. For example, it is a warning sign that since 1949, there has not been a single year without some industrial enterprise being wound up or amalgamated. In the Hungarian industry such event occurred in many cases even if it was not demanded or even opposed, "from above". In the following we shall try to demonstrate that in enterprise life there also were processes *independent of central decisions* which caused or accelerated the amalgamation or winding-up of enterprises.

Without losing sight of the permanent intertwining and interaction of enterprise activities with those of institutions (offices), from among the events and processes taking place in the world of enterprises it is the *enterprise crises* that we discuss in this article. We do not undertake to provide an exact definition of the enterprise crisis; at the given level of our knowledge we rather attempt to present the symptoms and phenomena accompanying the crisis, and then the process itself. For the time being, we shall

understand by crisis, roughly, the process through which the so far prevailing production factor combinations collapse.

The set of the enterprise crises may be both bigger and smaller than the set of mergers and winding-ups. It may be bigger, because not every enterprise crisis is followed by amalgamation. For example, in the course of an economic rehabilitation process the enterprise is helped out of its difficult situation. Also, it is not infrequent that the enterprise recovers by its own strength. The number of enterprise crises may also be smaller than that of mergers, since in a number of cases it is prospering enterprises or industrial cooperatives that are amalgamated so as to further progress, with their united forces, on the road to success, or on one they judge to lead thereto. We shall first discuss the symptoms of the crisis, then its antecedents, next the "averting" of crisis most often employed in the Hungarian industry and finally, the emergence of a crisis exactly in the course of trying to ward it off.

Symptoms of the enterprise crisis

The enterprise crisis can be described by a specific *syndrome.*

Let us see a few examples: "The Smelting-Works have beyond doubt got stranded. The year 1970 closed with a loss of over Ft 90 million and a heavy debt. . . Ft 100 value of output is now produced with an almost Ft 100 input. . . they have arrived at the point of insolvency. As compared with their plans and obligations, more than Ft 300 million is missing from their development fund for the 4th Five-Year Plan. It must be added that the income of their workers has not been rising, and in certain jobs it has even been permanently falling. This accounts for the bad atmosphere which has by now become general, for the low spirit and the unusually high fluctuation of labour." [1]

"Hardly a year has passed and 5 to 7 ton lorries of Soviet and GDR make were launched on the market, at prices lower by Ft 50–60 thousand, and the Csepel Motor Works . . . could not compete with the series of hundreds of thousands and the resulting lower prices. That is why in 1969, in the middle of an almost Ft 2 thousand million investment, the profit of the enterprise fell by Ft 100 million and it could not pay out profit shares. That was the trough; perhaps the most critical period in the history of the Csepel Motor Works. A low morale prevailed among the workers and they left in large numbers, larger than at any time ever since the existence of the Csepel Motor Works. . . In July 1972, upon the suggestion of the Ministry of Metallurgy and Engineering, the Economic Commission of the Government settled the finances of the Csepel Motor Works and thus their development-fund-deficit disappeared by the end of the year. The credit repayment obligation of the enterprise was suspended, and it was granted new credit as well as a Ft 200 million allocation from the budget." [2]

As it emerges from the examples, the most spectacular symptom of the enterprise crisis is a massive migration of *labour.* More exactly: a considerable worsening of the earlier indicators of staff reduction or of fluctuation. A very grave enterprise crisis is

indicated by the fact that migration begins also in the groups that are most attached to the enterprise.

Also larger inventories, mainly of semi-finished products and parts, growing at a faster than usual rate, are indicative of an enterprise crisis. At such times enterprise investments and reconstructions also slow down.

In the control sphere, the crisis shows first of all in *financial difficulties and liquidity* troubles. The enterprise is unable to pay out profit shares, or its development or reserve funds becomes exhausted, sometimes it has a deficit in funds, or it runs into loss. It cannot repay its credits to the bank (on time), or it may become indebted to its suppliers and in some cases even to its workers with their wages. All this leads to tension in the management of the enterprise, and to disorganization and confusion in the workshops. Insolvency, haste, and disorganization cause a deterioration in quality which, together with unobserved terms of delivery, may ruin relations with other enterprises. Finally—and this, too, is a symptom of crisis—the superior organs (the supervising Ministry, the National Council of Industrial Cooperatives, the Country Council, local and national party organs) turn their attention to the enterprise which has got itself into such a situation, and they discuss the matter at various forums, make decisions, give advice, and intervene.

Antecedents of the crisis

In a capitalist economy (on a buyer's market or, using János *Kornai's* concept: in a demand-constrained economy) the typical cause of an enterprise crisis is that the sales programme of the enterprise is not (or only partly) fulfilled.

In the Hungarian economy, in which a seller's market and various forms of shortage are prevailing, it may seem that sales difficulties can hardly lead to enterprise crisis in such number and to such extent as in a capitalist economy. During the 1970s most of the Hungarian industrial enterprises had, typically, a one to two year order stock and they can surely expect orders even today. Hardly any of them produces for stock or maintains and offers free capacity so as to satisfy the customer's demand at a short term.* And yet, in a considerable number of the cases, it is *sales difficulties* that give the first impulse to the above-mentioned crisis symptoms to appear.

An unexpected saturation of the market is often caused by the launching of a *related product,* more attractive or of larger capacity. For example, in the Metal Ware Industrial Cooperative of Nagykálló, ". . . one of their products, the metal basket used in self-service shops has gone out of fashion. Not very long ago the baskets of Nagykálló

*On examining the stock structure of the early 1970s, Katalin *Farkas* has found: "The overwhelming part of the inventories was composed, during the whole period, of material reserves. After some reduction (about 4 percent) in the 1960s, in 1973 the material reserves represented almost a half (47.5 percent) of the total stock." [3]

were in demand even for export. All of a sudden, the wire baskets were not wanted any more in trade." [4]

At other places, because of the diminishing demand of large state-owned servicing enterprises or institutions big surpluses may accumulate, or capacities are left unused: "Demand on the home market for our products fell to a quarter from one day to the next –said ... the managing director of the Transformer Factory–the news came to us on 18th November 1979 that our biggest customer on the home market: the Hungarian Electric Works Trust would call in merely a quarter of the capacity it had reserved for 1980." [5]

And, in the BHG Telecommunication Works: "The manufacture of telephone exchanges taken over from the Swedes had a slower start than planned. And when in 1971 the production could swing up, the Post Office reduced its orders." [6] The same effect may be produced by changes in the interstate agreements with these socialist countries, the reduction of export quotas, by measures aimed at creating bilateral equilibrium, or, in the Western relations, by changes in market orientation. In some cases sales difficulties arise from delays in concluding interstate agreements, or in drawing up plans and central programmes and in having them approved.

Also an enterprise without sales difficulties can get into a similar situation, simply because, owing to changed circumstances, it cannot buy the parts or components for its product otherwise in demand on the market. It may also happen that the raw material or part is available, but is too expensive: "The enterprise (Hemp-, Jute- and Textile Industry) manufactured and exported jute sacks, packing cloths and string, that is, rather primitive items. Its raw material came from India and Pakistan. In these two newly independent states, as in many other places, industrialization began with manufacturing textiles, and in it with that of the simplest textiles. Protecting their own young industry they started to skim off raw jute exports and support finished goods exports. The price of jute rose fast at the exchanges. And the price of the finished goods adjusted to the low wages of India and Pakistan. The foreign exchange receipts of the enterprise did not cover the cost price of the raw material processed in its products." [7] While, however, the difficulties in procuring parts (input side) are constant and recurring, and thus the ways of solving them are known,* sales difficulties are in general *unusual and surprising.*

Special ways of averting crises

Whatever the reason, the enterprise struggling with sales or purchasing difficulties has to answer the challenge. It seems that *most of the customary and successful answers of capitalist enterprises with similar difficulties are not or only rarely applied by the Hungarian enterprises.* For example, they would hardly bring themselves to reduce their

*Such temporary solutions are stock accumulation, autarky, borrowing from other enterprises with a similar line of production, etc. For more details on the subject see [8].

staff or to sell their unused buildings and machines (fixed capital) in order to reduce costs and increase their diminished receipts.

The rigid clinging to the production factors is explained by a number of factors not purely economic, but *political.* For example, full employment is considered by many as an untouchable social achievement. Further, the influence and *prestige* the enterprise managers enjoy on account of the *size of the enterprise* under their direction, and which may considerably diminish even through a temporary reduction of capacities are not to be underestimated. They stick to the fixed capital and labour also because stagnation or reduction are "punished" by the economic regulatory system which possesses, its many changes notwithstanding, the constant element of *interest in achieving an increment over the base-year,* the consequence of which is forced growth.

Even if we disregard—though in fact we cannot disregard—the factors affecting the enterprise "from above" and impelling it to keep the production factors, the enterprise still has many reasons to avoid, if possible, reductions. First, there is the experience that in this economy sales crises are, as a rule, not very grave. They do not even last for long, therefore, it is not worth "squandering away" the production factors which are hard to procure on the market. In a place like Hungary, where it is a general state of affairs that enterprises can choose among orders, buyers are ranked, and it is usually possible to make the buyer accept the seller's terms in respect of quality, quantity and date of delivery, it does *seem* realistic that the trouble is only a temporary one. It is also justified to assume that in the midst of a general labour shortage, when it is not easy to purchase on the market of investment goods and capacities, either, it is rather risky to let the workers go and let other enterprises have the machines, installations and buildings.

In any case, the Hungarian industrial enterprises usually *adjust* their staff number and the size of their fixed capital to *rushes*—that is, to the periodical full—or over-utilization of capacities.

Therefore, the temporary underutilization of capacities is a regularly recurrent state, which it is for some time almost impossible to distinguish from excess capacity owing to sales or material purchasing difficulties. It is very risky to get rid of the surplus at such times, since it is very difficult to find free labour on the market at the time of a fast rise of production.* Nor is it easy to buy machines, or to build.

Therefore, the difficulties in sales and material supply are best met by the enterprise if it tries in one way or another to keep the labour, while increasing its efforts to boost sales. If possible, the enterprise will also increase the real or supposed advantages which linked the workers and the clerical staff to the enterprise in the earlier period free from crisis. The main reason is not that managers wish to care for their staff—"people have to be given work"—although their goodwill and humanity cannot be doubted.

It is more important that they are compelled to act in this way since, because of the difficulties in sales and material purchasing, the earlier regular course of production (the routine alternations of rushes and stops) gets upset, which results, for a number of

*Gyula *Tellér* has called my attention to this.

workers, in changes in the usual and accepted wage/output proportions, that is in a deterioration of wage conditions. At least it may have this consequence and this urges a larger than usual number of workers to leave the enterprise. Hardly is it probable that at such times the number of those wishing to enter would rise at a rate or in numbers similar to those leaving.

The enterprises try to keep also the other production factors—for the reasons already discussed—their efforts are, however, mainly directed at keeping the most mobile factor: labour.

At the same time, they make efforts to maintain sales volumes, to keep or even increase their share on the market, and to make up for lost markets, segments of markets, and inter-enterprise relations. Of the customary means used for these purposes we shall not discuss now price cuts, improved quality, improved services, shortened times of delivery, or greater respect for deadlines. It is to be remarked that under the conditions prevailing on the Hungarian market, even though it is possible to use these means, it will be a rare case when the buyer can be offered anything much better than before.

We shall now turn our attention from the temporarily or permanently saturated old markets and the traditional inter-enterprise relations to the field of enterprise activity which the economic jargon in Hungary calls *"changing of the product pattern", or, enlargement of the range of manufactured products.* At the formerly mentioned Csepel Transformer Factory: "they started to repair Hungarian transformers (undertook such kind of servicing), to manufacture crane-baskets and crane-runways in commission work, and to produce oil filters for the Machine Factory of Pestvidék." [9] At the Electronics Cooperative: "In order to provide work for the members, and to secure profitability, new orders were sought to replace the orders for instruments which had to be dropped from the programme. They have succeeded in finding them. They started to charge batteries and, in compliance with the wish of some of their associated cooperatives, to manufacture items for strip light armatures." [10]

In the Békéscsaba Knitwear Factory the managing director told that the trouble was that "we had made bootlining, and lined boots went out of fashion, and there was no order... We have left no stone unturned to find articles in demand. Whichever we thought might be interesting we started to make and place on the market." [11]

Enterprises struggling with sales difficulties use this mode of increasing turnover also in the advanced market economies. In Western Europe and in the United States a great diversification wave was seen after World War II. At that time, a lot of companies suddenly increased their turnover not on the market of their traditional products, but in other branches of the economy.

The diversification taking place in Hungary has, beside the numerous similarities, a few specific features important also for a better understanding of the enterprise crisis. On the one hand, enterprises, especially the big ones, start to manufacture new products also because of the urging and expectations of ministries. Further, at the request or wish or even instruction of state and social organs referring to *the enterprises' responsibility for*

supply, they are very reluctant to stop the manufacture of certain articles, or to abandon certain services.

On the other hand, the Hungarian industrial enterprise or cooperative struggling with cooperation and purchasing difficulties is willing (or is compelled) to grow vertically, to organize parts production within the enterprise, to become self-supplying–also to be considered as a specific form of diversification.

Owing to the factors acting towards enlargement of the range of products or hindering its reduction, many Hungarian enterprises produce a rather high number of articles as compared with their dimensions and potentials, and they are able to produce even more ("general store"). Especially those which constantly changed their production pattern under the directive planning mechanism. In other words: not much is needed that a number of enterprises get into a hardly definable but existing state of *overdiversification.* If, because of the selling and purchasing difficulties, such an enterprise includes new products and services in its range of products, it may very well happen that the crisis-mitigating effects of the action will be neutralized or even surpassed by the consequences disadvantageous for the future life of the enterprise.

To stick to our former examples, at the Csepel Transformer Factory: "the workers saw their situation as hopeless. Many of them asked for their work-book and went to find a new job. Within a year, the staff of the enterprise fell by 10 percent." [12]

At the Electronics Cooperative: "Because of wrong market estimations and insufficient knowledge, their expectations did not come true. As the drowning man clutches at every straw, they made one desperate attempt after another. The loss rose by then to catastrophic dimensions." [13] And in Békéscsaba "instead of a solid profit, a loss of more than Ft 3 million was the result of the action." [14]

The risk involved by enlargement of the range of products is increased by the numerous disadvantageous characteristics of most of the products newly included. In most cases they are shortage articles because they became unprofitable for the earlier manufacturer, or, they have no manufacturer because none of the enterprises want to deal with them. The reason may be, for example, that they earned low profit, or the buyers ordered only small lots, and even that spasmodically. It may also be that the costs of introduction and training were higher than usual.

Emergence of the crisis while it is being averted

The above-mentioned problems are soon indicated by the market i.e. the buyers. For example, an enterprise in such a situation quite often starts to manufacture an article without due preparation, which will then be of an inferior quality or gets to the buyer with a delay. Production processes, and the conditions that develop at the workshop because of jerks in the production process are fast and efficient signalling systems: "In a crisis situation hidden deficiencies and disorders became all too obvious: for example, the difficulties of material supply and reserve management. We could not do anything, we

had full stocks, and what work we had could not be done because of lack of materials. Materials had been ordered according to the base year and not according to need. Also, discipline became lax. First there was nothing to do and later, suddenly, we had a lot of work. At such times, not much attention is paid to the order of vouchers. Workers must be paid, whether they have work or not, necessity knows no law. Only, after the hard times are over, it is not easy to make order again." [15]–may be read in the report on the crisis of the Csepel Transformer Factory. Workers probably appreciate that the managers "acquire" work for them. On the other side, they will soon notice if, owing to enlargement of the range of products, material supply becomes irregular and they can earn less or, which is the same thing, earn the same income through greater effort and more difficulty, because of the small series and frequent changes of programmes and plans. Our example shows as well that production management and material procurement which already had difficulties in satisfying the preparation and programming of production because of the "almost overdiversified" range of products, have now to work under even harder conditions in the new situation. They act with even more ingenuity, and yet it seems they fail more often. Seeing this, workers announce their wish to leave, or leave in fact, in increasing numbers. Because of growing disorganization, stocks of unfinished products and of materials may grow again, and within it the rate of immobile stock. New cooperation relationships may also cause surprise. For example, because of them, the enterprise is unable to deliver on time, and therefore, some of its receipts come in with delay and thus it becomes temporarily insolvent, etc. However strange it may seem: in many cases it is in the course of averting seemingly not too bad difficulties in sales and material purchasing that the "real" crisis emerges. The so far hidden internal and external weaknesses of the enterprise become evident.

This process may recur several times indicating that the "invisible period" of the crisis may last for years and decades. In order that the enterprise crisis can emerge and the enterprise can be reorganized or amalgamated, other internal motives are wanted beside the recurrent sales and purchasing difficulties as *necessary conditions* catalyzing the process. The behaviour of those manager and worker groups is of decisive importance, which are dissatisfied with the prevailing situation, and yet are bound to the enterprise and to the adopted technology by their qualifications and local knowledge. These groups are strengthened when an enterprise or office comes up suggesting a merger and thereby the easing of difficulties. A merger or amalgamation is often suggestive of putting production lines in order. This not only offers workers better wage conditions (big series, etc.), but also it clearly promises improvement to the programmers of production. Let us see a few examples of the pleasant consequences of a reduced range of products, by all means spectacular in a short term, easing tensions: of the former Baja Iron Industrial Enterprise amalgamated into the Ganz Electric Works we are told that "This factory of Baja, grown out of a small state-owned enterprise and still crammed into a former barrack, used to do everything from car repair through typewriter service to vine sprayer manufacture, and was heavily weighed by the disadvantageously wide range of products. It was compelled to divide its energies among welding machines, laboratory conveyors,

vacuum-cleaners, household water supplying, oil-, water-, and metal-cleaning equipments, resistances, switches, etc. Reorganization brought first of all a clear line of production to the factory. It has started and will go on producing regulators to be fitted in trains and tramways gradually getting rid of articles alien to this line." [16]

"The former General Mechanical Engineering Factory made a backward step in its "status", but rose in rank. That is to say, from an independent enterprise it has become a factory unit but, at the same time, from a "general store" it turned into an engine factory, since it has been merged with the Ikarus of Budapest. This one-time repair shop working in barrack and hangar buildings inherited from war times was given the attribute "general" not without reason. It produced not only innumerable kinds of goods, but these goods were of a strikingly mixed nature. Among other things, it manufactured testing benches for scales and electric fittings of motor cars, driving compartments for dumpers, cheese-vats, parabola aerials, electric trucks, geodesic prospecting cars, repair trucks, miners' buses... and, at the same time, it did repair work as well. Since that memorable Ist January 1963 the range of products has been narrowed down and, what is more important, it has risen to a higher level: the factory now manufactures exclusively special motor vehicles." [17]

And finally, an example from the 1970s: "Also the machine station of Mór lost its ground when the agricultural cooperatives of the district became independent and began to repair their own machines. Changing its name and character several times, if finally became a general industrial enterprise. It undertook all that was possible, and yet could not provide its 200 workers with regular work. People earned little, and many of them went to find other jobs. And then came the Metal Works of Csepel... They announced their wish to set up a heat-treating and electrode workshop." [18]

If, in addition, the amalgamation makes investments unnecessary, or reduces costs, it will be supported by further manager groups, or at least will not be opposed by them. The merger of the coal mining trusts of Pécs and Komló offered such advantages: "... earlier, for example, a new electric workshop ought to have been set up in Komló at a cost of Ft 8,5 million. It would have served the coal mining of Komló alone. Now we shall make the electric workshop at a cost of Ft 2.5 million less, through some regrouping of materials and specialists, and in a way that it will supply also the area of Pécs... Of a similar importance is the setting up of a central mechanical workshop and of a central material store. An example to support this statement: in the Komló area valuable rubber and scraping conveyor belts were on store, planned to be mounted in six months. When the trusts merged, these conveyor belts were sent to Vasas, where they were immediately needed..." [19]

The merger of the Oil and Gas Producing Enterprise with the Transdanubian Prospecting and Exploring Works "creates better conditions for a more efficient work. For example, it can be avoided that certain phases of work be done parallelly at both enterprises. The united material management and storing are more rational, beside other things, running expenses have decreased... it is expected that in the "new set-up" the yearly Ft 400 million running expenses can be reduced by at least 2 percent. According

to careful estimations, more than 5 percent can be saved with the amount to be spent on public road transportation." [20]

And, at the same place, a further, not negligible advantage: labour saving, that is, the release of labour for other purposes: "The merger makes it possible to accomplish the increased tasks with a smaller staff than the present one." [21] It is a further advantage, if the fusion helps to gain a monopolistic position on the labour market: after the fusion of the two shoe factories of Szombathely, the managing director said that "we also expect from the amalgamation that the almost constant migration of workers between the two factories will stop." [22]

In other cases the bigger enterprise increased the security and smoothness of supply with materials. At the instrument factory of Baja, where supply with materials had formerly been difficult, "the central store tries to satisfy" after the merger "even extra demands, while reserves can be reduced to some extent, on account of the centralized material management. Supply with tools is also smoother and more efficient than before. The centre satisfies needs directly from the store and, besides, its modern tool workshop also produce the instruments indispensable in serial production." [23]

This means that the enterprise crisis cannot always be solved by including new articles in the range of products, what is more, because of overdiversification, difficulties tend to grow worse. In such cases chances are great that the majority of those interested will seek solution in reducing the range of products through merger. Such reduction involving the elimination of several products and the resulting *saving in costs* may entail obvious and quickly felt advantages, which also encourages the interested parties to effectuate a merger. It is another question that the expectation may prove wrong and that *the disadvantages and harmful consequences of the merger are usually not felt in the initial period, later on, however, they may overshadow advantages.*

Of course, it would be a mistake to overestimate the role of the overdiversification processes in producing or warding off a crisis. First, there are other means used in such instances, for example, fighting for the quotas laid down in the socialist interstate agreements, for barter business, or for winning state-owned institutions as buyers.* Second, it cannot be left out of account, that in many cases even such enterprises are amalgamated which have not been in an economic crisis.

And yet, without the enterprise crisis, the mergers and amalgamations in many cases could not be explained. And let us note that there is hardly a Hungarian industrial enterprise or cooperative which has not shown at least for some time the above described crisis symptoms and has not used the methods of warding them off as presented in this article.** The phenomenon which we call enterprise crisis has been prevailing in a sphere of enterprises too wide and for periods too long to explain, in itself, the mergers.

Besides, we do not yet know, why the merging activity gets intensified from time to time, and why this form of solution of enterprise crises is chosen more often in certain

*Annamária *Inzelt* has called my attention to this.

**Péter *Vince* has called my attention to this.

periods. It does seem likely, however, that the merging campaign *infers* enterprise crises. During such periods the processes in course within the enterprise already for a long time get *accelerated* and become obvious.

Our theorem is, therefore, a rather loose one: what we assert only is that, in order to solve its sales difficulties, the Hungarian industrial enterprise rather often resorts to a certain kind of tactics: enlargement of its range of products. This tactic usually succeeds in solving, in the short run, the most urgent task: labour stays with the enterprise. If, in the meantime, the enterprise becomes overdiversified, it will be exactly this means of surmounting difficulties that renders the so far hidden symptoms of the enterprise crisis visible. And this makes the enterprise a possible subject of amalgamation. However, the enterprise crisis is at most a necessary, but surely not a sufficient condition of amalgamation.

References

1. Sólyom, J.: A párttitkár gondja (The party secretary's worry). *Népszabadság* 27 May 1971.
2. Tamás, M.: Merre tart a Csepel autógyár? (Where is the Csepel Motor Works heading to?) *Népszabadság* 10 October 1972.
3. Farkas, K.: *Készlet és adaptáció; készletfolyamatok a népgazdaság különböző szintjein* (Stock and adjustment; inventory processes at various levels of the national economy) MTA Közgazdaságtudományi Intézet. Budapest 1976. (Mimeo) p. 9.
4. G. Nagy, Z.: A kockázat kora. Nagykállóban talpra álltak! (An era of risk. They got straight at Nagykálló). *Szövetkezeti Hírlap* 27 November 1971.
5. Pichler, F.: Csepel Transzformátorgyár – Nyereségből veszteség? (Csepel Transformer Factory – Loss–from profit?) *Figyelő* 10 July 1981.
6. Tamás, M.: Halló, BHG? Telefonra várunk! (Hello, BHG? We are waiting for telephones!) *Népszabadság* 2 December 1973.
7. M. N.: A csődtől a nemzetközi tekintélyig. Öt év alatt megújhodott a Kender-Juta (From bankruptcy to international esteem. In five years the Hemp and Jute Processing Factory has revived): *Népszabadság* 10 June 1971.
8. Laki, M.: A háttéripar fejlesztése (Development of the background industry). *Gazdaság* 1980. 3.
9. Pichler, F.: Op. cit.
10. Remete, L.: A válságot leküzdötték. Az elektronika kibontakozásának útja (The crisis has been surmounted. The way of development of electronics). *Szövetkezeti Hírlap* 5 September 1970.
11. Tamás, E.: Az "ejtőernyős" igazgató (The "parachuting" managing director). *Népszabadság* 15 November 1978.
12. Pichler, F.: Op. cit.
13. Remete, L.: Op. cit.
14. Tamás, E.: Op. cit.
15. Pichler, F.: Op. cit.
16. Marton, M.: Közérzet és vállalati összevonás (General atmosphere and enterprise fusion): *Népszabadság* 11 September 1964.
17. Marton, M.: Vegyeskereskedésből autógyár. Fehérvár öregbíti az Ikarus márka becsületét (From general store to motor factory. Fehérvár enhances the good reputation of the Ikarus brand) *Népszabadság* 16 July 1965.
18. Máté, Gy.: Két esztendő egy új üzemben (Two years in a new factory). *Népszabadság* 8 Octobe 1970.

19. Sólyom, J.: Az egyesítés első tapasztalatai (First experiences of the merger). *Népszabadság* 28 January 1964.
20. Kónya, J.: Egy vállalat olykor több, mint kettő. Új feladatok előtt a zalai olajipar (One enterprise is sometimes more than two. New tasks facing the oil industry of Zala). *Népszabadság* 27 January 1978.
21. Ibid.
22. Kapalyag, I.: Megszűnt a gyár, éljen a gyár! A Sabaria és a Bőrdíszmű sikeres házassága (The factory is dead, long live the factory! Successful marriage of Sabaria and Bőrdíszmű). *Népszabadság* 12 March 1976.
23. Marton, M.: Op. cit. [16]

КРИЗИС ПРЕДПРИЯТИЯ

М. ЛАКИ

В венгерской промышленности кризис предприятия имеет своеобразные симптомы. Основанная на анализе происшедших в 60-х и 70-х годах кризисов предприятий статья считает наиболее важной причиной возникновения такого своеобразного состояния трудности сбыта. Упорно стремящиеся сохранить наличные факторы производства венгерские предприятия не могут и не хотят прибегать к известным в практике капиталистической экономики методам предотвращения кризиса. Вместо увольнения рабочей силы, реализации основного капитала они часто расширяют ассортимент продукции. В ходе этой своеобразной диверсификации производства развертывается настоящий кризис предприятия, укрепляющий позиции тех, кто надеется решить проблемы с помощью слияния (укрупнения) предприятий.

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INNOVATION, SOCIAL ENVIRONMENT, HUMAN FACTORS

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In recent years a vivid discussion evolved among experts on innovation, and one of the important statements arrived at has been that the main pledge of development is the Hungarian labour force. In his article the author tried to analyze this subject and came to the conclusion that, although the capacity of the Hungarian labour force is greater than its actual performance, in consequence of the socio-economic development over the last three decades values, abilities, etc. not quite corresponding to the requirements of innovation and of modern management have developed, which are today obstacles to the modernization process.

In agreement practically with all who see the pledge of further development in Hungary in the evolvement of innovation processes [1, 2, 3, 4, 5], I shall try to examine in the following, looking through *a labour force planner's glasses*, why progress is so slow in this field in spite of the obvious economic (foreign market sales) pressure and political determination*.

It follows from this particular viewpoint that I shall centre my attention first of all on the *personnel conditions* having developed as a result of past socio-economic processes and which will determine the qualitative potential** of the labour force in the coming period. The effect of these conditions is obviously unfavourable for innovation, but they can only be changed through a series of consciously planned measures, through a long period, and at the price of no little social conflict.

*Even in 1980–three years after the decisions on structural policy of the Central Committee of the Hungarian Socialist Workers' Party–the average age of the products of the state-owned industrial enterprises was about 15 years (not counting the products of mining and of the electric energy industry. Within this, the age of the products exported to the rouble market was 11 years, and that of the products sold on the non-rouble market was 17 years. (This means that it is still the traditional Hungarian products that are better marketable, especially in the trade with non-socialist countries.) It shows the slow modernization process of the product pattern that only 2.6 percent of the products sold in 1980 were launched in the given year, only 2.2 percent were modernized, and 3.1 percent were modified. "Modification" means small changes characteristic of the light industry, such as adjustments to the changes in fashion. [6]

**Planners of the labour structure in the National Planning Office have been for years interested in the quality of the labour force. However, this is the first opportunity to carry out specific examinations, in cooperation with the National Board of Technological Development. Therefore, my following conclusions and statements are based partly on the results of other examinations, and partly on assumptions.

Past processes and the quality of the labour force in Hungary

*Incongruent employment**

As a consequence of forced industrialization, the socialist reorganization of agriculture, and the shift in the specialized administrative staff (with which the development of the educational and training system could not keep pace) a chronic shortage of specialists and an incongruence owing to insufficient qualification evolved, considerable even in 1970. Its extent is shown by the following figures: there were about 50 thousand graduated specialists (or those with similar qualifications) fewer than would have been needed; about 300 thousand non-manual workers (approximately a quarter of the total non-manual (white collar) staff) did not possess secondary school leaving certificate (incl. skilled worker training school certificates), and 40 percent of those having skilled worker certificates had broken off their primary school studies.

Within the non-manual group it is especially conspicuous, how the educational standards of the managers lag behind requirements. In their case, the lower than required educational standards may entail disadvantageous consequences not only in the short but in the long run as well, since, instead of caring for replacement, such managers usually surround themselves with specialists not of the best abilities. It is true, though, that training through evening and correspondence courses has been intensively developed since 1950, first of all with a view to eliminate the shortage of specialists. (About 30 percent of the graduated specialists employed in 1970 obtained their diploma at evening or correspondence courses.) On the whole, however, the competence of those having accomplished such courses is poorer in comparison with those having attended day courses.

In the 1980s the shortage of specialists is going to be eliminated. And yet we cannot expect any considerable reduction in the measure of incongruence. It is because the specialists with inadequate qualification are, as a rule, only replaced by others with the required qualification when the former are pensioned off. Therefore, this kind of qualitative exchange is prolonged, which may also be the cause of negative selection (for example, because of the long waiting time deterring a lot of gifted people). Further, in vain are specialists available in adequate numbers, if masses of them are engaged in jobs other than those corresponding to their professional qualification. (About a third of the agricultural cooperatives, and a number of industrial establishments and educational institutions in the provinces are today faced with such difficulties.) There are various reasons for the reluctance of specialists. Not infrequently, and especially in case of the graduated specialists, the main reason is the attraction of the town, or of the capital city,

*The question of congruence in employment has been examined first of all by Árpád *Olajos*, partly in cooperation with the author of the present study.

as well as of the related professional and other advantages. An important role may also be played in it by the inadequate receptiveness of those offering the jobs, which may be due to conservatism, personal counter-interests, etc. Finally, parallel with the increasing emancipation of women, it may increasingly become a cause of incongruent employment, if the family' settlement in the provinces breaks the wife's professional career.

The side effects of social mobility on the labour force

The fast transformation of the occupational structure and increasing urbanization were concomitant with strong mobility, as was demonstrated by the mobility investigation of the Central Statistical Office carried out in 1973. The overwhelming majority of the white collar workers come from manual worker families, and quite a large number of them (decreasing, though, from the 1960s) turned from manual workers through intragenerational mobility. Most of the skilled workers (mainly in industry) also are of a first generation. A great number of them come from agricultural worker families, or were at first agricultural workers themselves. Their mobility usually entailed a loosening of the home ties–because of moving from villages into towns, or commuting–and thereby not infrequently a rootlessness. The massive migration into towns, the difficulties of adjustment and of the changed way of life led to an increasing occurrence of deviant behaviour, particularly among the semi-skilled and unskilled industrial and construction workers. And the small-scale agricultural production activity of the commuters–otherwise socially useful, and even indispensable–has for consequence the withholding of performance at the workplace.

These few examples are enough to demonstrate that the fast and large-scale social transformation had some disadvantageous effects on the quality of the labour force, and "diluted" certain social groups. This can be traced, for example, in the low level of the foreign language knowledge of today's brainworkers, in the deterioration of the work discipline of manual workers, and of the quality of artisans' services, etc.* (Of course, other factors had their part in this, too.)

The unused knowledge of the specialists

According to unanimous findings of sociological examinations inquiring how qualified people adapt themselves to their jobs, qualified experts feel that their

*Recognizing the interrelation between accelerated social mobility and the "dilution" of social groups, Zsuzsa *Ferge* came to the conclusion already in the 1960s–still holding, in my opinion–that as opposed to the maintenance (even by administrative means) of the re-stratification, in the future group mobility (approaching the different social groups to each other) should be promoted. [7]

knowledge is under-utilized. The unanimous answers make one think even if it is assumed that they are partly due to an inadequate self-knowledge of those questioned.*

The technical and agricultural specialists complain, among other things, about the very high ratio of administrative work, at some places consuming one third or even a half of their worktime, as well as about the shortage of auxiliary staff (technicians), whereby their energies are in a great part consumed by providing for the necessary working conditions. A further difficulty is to earn a decent living and to establish the required living conditions, in many cases impossible without undertaking secondary occupation incongruent with their original qualification. Finally, it is felt as a basic problem that their actual tasks are undemanding: there are a great many jobs of low technical standards, or fast solutions are demanded, which do not allow any profound study. One is led to assume that the system of requirements of enterprises is in fact of low standards, since the examinations have demonstrated that specialists with qualification in natural sciences, best qualified to solve tasks of scientific nature, are hardly employed.

In the opinion of enterprise economists the managers' thinking lacks the economic approach, therefore, real economic work at the enterprises is pushed to the background.

Therefore, a high ratio of those working in their profession are dissatisfied with the possibilities offered by this profession, and with the requirements made on their work.

What can be the reason for the under-utilization of their professional knowledge?

I do not share the opinion held by many, according to which the reason is to be found in the oversized higher education and in one of its consequences: the low level of earnings.** As I see it, oversized training is not characteristic of higher education, except for a few lines, and especially not in university education. In fact, the trouble is rooted in that, on the one hand, the forecasts of demand for qualified specialists and the training adjusted to it are based on a "quasi-advanced" economic structure [8], that is, a demand for specialists corresponding to a formally adequate institutional structure. If the economy fails to function in a satisfactory way, and therefore the tasks of the specialists get distorted, this cannot be considered a problem arising from oversized training. On the other hand, the underutilization of the knowledge of the graduated specialists is certainly due to the unpopularity of the posts offered in backward regions, to which the qualified people prefer to perform work of lower standards in the capital city or in big provincial towns.

*The low degree of self-knowledge of those having recently entered a job is demonstrated by the examination of the Felsőoktatási Pedagógiai Kutatóközpont (Research Centre for Higher Education) (Mrs. M. *Déri*, Mrs. I. *Szabó-Déri*, K. J. *Szilágyi*, P. *Völgyesy:* Munkahely-választás előtt (Before chosing a job). The authors demonstrated that in respect of abilities considered by graduates to be important (for example, creative imagination, decision–making ability, flexibility of thinking), requirements were rated higher than the abilities the graduates disposed of in their own judgement.

**This opinion is represented, for example, by Mrs. K. *Falus-Szikra* in her study [2].

*Socio-economic development in Hungary and job requirements**

In order to understand the problems of today, special attention must be paid to the effects of the following characteristics of the social and economic policies aimed at socialist transformation and development, exerted on the requirements raised towards labour.

Among other things, in the spirit of efforts at eliminating unemployment and at strengthening the role of the working class, industry and building industry were developed at a forced rate in Hungary. Between 1950 and 1970 the number of industrial workers had doubled, and the staff of the building industry had almost quadrupled, in a way that the majority of the new workplaces were established at low or medium technical standards. (The high differentiation of the ratio of mechanical work among sectors arises from differences in technological conditions. This does not contradict the relative levelling of technological standards among sectors, which is further supported by the generally backward state of mechanization of auxiliary processes.) To this was also adjusted the product pattern which, with its medium standards, practically corresponded to the socio-economic requirements of the time: to the demands of the Hungarian and of the socialist foreign market. A real increase of Western exports became indispensable as late as in the 1970s, among other things, with a view to improving the balance of payments of the national economy; in the preceding decades Western imports had been in a great part counterbalanced by agricultural exports.

This kind of even and undifferentiated development of the sectors was supported by the system of incentives and regulators, which did not prompt enterprise managers to achieve any outstanding results or to take risks for such end, but instead, to overinsure themselves and to satisfy only the average requirements. What is more, society was suspicious towards the manager who supported a new idea or an invention, and it was suspected that the pursuit of mere personal interests was behind the said manager's zeal. To this conception and practice correspond the relative wages of the non-manual workers, among them of highly qualified specialists: the primary role of the hierarchical position in the differentiation of earnings, the low prestige and relatively decreasing wage level of the subordinate experts, researchers-developers, and decision-preparers, as well as the upgrading of the operative managers solving the daily difficulties of current production. This all is a natural consequence of the "soft budget constraint", the concomitant of a levelled development policy, which does not make enterprises interested in the fullest possible exploitation of the potential efficiency inherent in organization, in research and development, and in production development, that is, of the knowledge and creativity of the specialists who play a key role in all this. Although this has caused a dilution of the group in question for a long time, according to the above described facts about the employment of specialists, there still are some mobilizable reserves in this field.

*In elaborating the present chapter, I largely relied on the study [8] by Ferenc *Jánossy*, and on the book [9] of János *Kornai*.

Groups and types of knowledge of key importance for an ecomomic revival: obstacles to progress

One of the sources of today's difficulty is the deficient qualification of the *top managers.* Not only remains their formal qualification below the standards required for their post (more than in the case of the employed specialists), but, as a consequence of the system of selection of managers, also their actual knowledge and managing abilities leave much to be desired. The selection that observed other factors beside economic efficiency, even to the prejudice of the latter, led to a situation that many of today's managers are unable to satisfy the demands of the accelerating modernization process, on account of their insufficient qualification and approach to innovation.

The revival is first of all in the hands of *engineers* engaged in *research work* and in the preparation of technical decisions. Today the majority of research and development in Hungary is "following suit", which can only partly be attributed to the relative development level of the country's economy. It is owing partly to the deficiencies of the system of incentives, and partly to the engineering society's having become passive, and lacking creativity and orientation towards performance.[10]

Economists and the legal profession are also to play an important role in a market-oriented economy. Enterprise independence has much increased after 1968 in comparison with the directive planning system, and the importance and professional perspectives of the said specialists have been enlarged by enhancing the economic approach. Yet the knowledge of practical business and of the market (especially the foreign market) has not been raised to the rank of a general requirement. In this respect, and even in the field of special knowledge in general, we are probably lagging seriously behind. And, though it seems to be a question of secondary importance, the insufficient number of *industrial designers* also hinders the sales of industrial articles.

As regards the *staff of workers,* the most serious difficulty is the widely varying work culture. In the so-called dangerous establishments labour discipline is relatively better, and qualifications higher (though this is less so in mining). In the majority of the manufacturing industries, however, masses without industrial traditions had arrived (let us think of the industrialization in the provinces during the 1960s) without really having to accept the discipline and quality requirements of factory work, because at the time, with shortage prevailing, products of a poorer quality were easily sold. Later on, struggling with an overall labour shortage, enterprises were forced to make concessions to the prejudice of labour discipline in the broad sense (from technological discipline to the regularity of attendance), in order to keep the labour force.

In comparison with what is needed for an economic recovery, a serious lag is present in several *types of knowledge.* Within this, the *knowledge of foreign languages* is not only scarce and of low standards, but also of a structure not corresponding to the requirements of the time. A much more extended knowledge of foreign languages would be necessary in the trade transacted with other countries. The practical knowledge of the *organizers* lags far behind their theoretical knowledge. This is reflected by the backward

state of the practical organizational work, and partly by the fact that the advice of foreign organizers is usually preferred to the suggestions of the Hungarian specialists. It is partly because of the one-sidedness of special knowledge that *material and energy saving* products are lacking; by international comparison, most of the Hungarian per unit material norms are high. Finally, the Hungarian enterprises' and foreign trade enterprises' inadequate knowledge of the international patent and commercial law has to be mentioned, which hinders a more efficient protection of the intellectual values and the exploitation of foreign market potentials.

Future processes affecting the quality of the labour force

Counter-selective effects of the educational system

The "filtering mechanisms" of the educational system counteract the fulfilment of the quality requirements made on labour in several respects. One of the reasons is that selection is based mechanically on school achievements instead of real abilities and talents. It is a further problem that, as a side-effect of loosening relationships between school achievement and social position, school standards have been lowered at all levels of the educational system. Medium-level specialized training is faced with the grave problem of the lower prestige of manual occupations—and, as a consequence, of the types of school training for such occupations—in comparison with the non-manual occupations (for example, clerical work) of lower special standards. But even within the sphere of manual occupations, selection is only partly based on high requirements. For example, because of poor working conditions and relatively low wages, there are hardly any applicants for the mining, metallurgical and the traditional engineering trades requiring thorough special knowledge and particular abilities, and the situation is the same in the agricultural trades because of aversion to the way of life in villages. The negative selection found in higher education is reflected first of all in the qualitative deterioration of the new generation of engineers, of key importance for the future. I wish to stress that most deficiencies of the selection system are to be traced back to the anomalies of employment, that is, to those of the underlying socio-economic mechanisms. Exactly for this reason, no fast change is to be expected, since the effect of changes in the social mechanisms on individual intentions is only conceivable with a considerable time lag.

Beside the contradictions of selection, the training of skilled workers struggles with difficulties presented by the contents of the curricula which have an unfavourable effect on the adaptiveness of the trained to various trades. Until the comprehensive measures taken in 1981 on the basis of the new list of skilled worker trades, one of the difficulties had been the fragmented state of specialized training. However, the 1981 changes have not brought a fundamental change in the knowledge imparted, in which the special knowledge that quickly becomes obsolete still has a large weight. The inadequate general level of education of those entering the institutions, training for manual occupations, is a

further obstacle in the way of special training to be placed on broader grounds. What is more, skilled worker training is directed even in the vocational secondary schools at a narrow sphere of trades. (The less convertible special curriculum of the skilled worker training institutes has replaced the earlier more convertible specialized theoretical curriculum, comprising whole groups of trades, of the vocational secondary schools.)

Factors having favourable influence

From the aspect of the future development of the quality of the labour force, it is a favourable phenomenon that the educational standards of the population and the ratio of those with special qualification are rising. In the course of the so-called demographic exchange, the old workers of lower educational standards are replaced by the more highly qualified young generation.

It is a further favourable factor that, as opposed to the forced rate of changes in earlier years, no spectacular changes are to be expected in the structure of the labour force (only the infrastructural staff will be enlarged intensively). Therefore, a smoother, more balanced, and more "organic" development is likely to follow. Thus, for example, as a consequence of the stagnation or reduction of the industrial staff, and of the exhaustion of the extensive labour reserve, generations used to or prepared for industrial work will be taking part in industrial production, which can provide the grounds for an improvement of the industrial work culture.

Tasks arising from the likely development of the quality of the labour force

The qualitative inadequacies of the labour force available at present and in the ten or twenty years ahead on the one hand constrain the emergence of an economic recovery, and on the other hand make it contradictory through the accelaration of the mobilization processes serving qualitative replacements. A lot of questions have to be clarified in advance, in order to prevent an overstraining of social tensions. In the following I shall attempt to make a summary of those seeming to be the most important.

Development of the existing labour force

In the final account, improvement in the quality of the labour force depends on whether the economic environment raises stricter requirements. At the same time, in order to keep pace with increasing demands, it is necessary to take a few deliberate measures aimed at improving the personnel conditions, such as the introduction of courses serving to enhance performance motivation; intensive development of the

knowledge of foreign languages; teaching of directly applicable knowledge, procedures, and know-hows wanted in practice, to technical developers, organizers, market researchers, commercial and advertising specialists, etc.; modernization of the training and selection of managers; and, in general, a purposeful exploration and development of individual abilities and talents.

The development possibilities of the human factors are as yet constrained by the fact that the sciences dealing with man (sociology, psychology) have not yet been granted the position due to them in everyday life. Not only that the apparatus of enterprises and institutions in charge of personnel affairs is not sufficiently trained in this respect, no adequately trained social workers are available to deal with the groups of society in need of social care either.

In a long perspective, modernization of the school system is of key importance in view of development of the human factor. Raising of the standards of general education as well as the promotion of knowledge, abilities and talents serving a flexible adjustment to the changes of economic environment ought to be given more importance in the training of specialists, and the same holds for the strengthening of creativity, and developing a positive attitude towards novelties.

A clear definition of the sphere of economic renewal

As it has been demonstrated, a part of the labour force available in the twenty years ahead of us will be unable to fulfil growing requirements. Therefore, the question arises, on how large a section of the economy, in which of its fields, and at what rate the renewal process can take place.

First of all, the so-called competitive and non-competitive sectors have to be separated since, for example, in the case of mining, electric energy industry, or the non-productive infrastructure, it would be a strong conceptual "shift" to talk of renewal in the same way as in the case of the competitive sectors. [11] As for the latter, it is to be seen that the measures stimulating small enterprise put the medium and large enterprises in a new situation. If they fail to differentiate the wages of their workers according to the principle of performance with a view to achieving the enterprises' targets, they will lose their creative and enterprising specialists and will get into an increasingly disadvantageous position. In the case of such enterprises, there is no other way but to firmly assert the requirements of an efficient economy. It is, however, open to question, whether the risk can be taken to expose to competition such enterprises which could not, at least for the time being, hold out in a competition. In view of this, it is likely that the enterprises can be drawn into a new type of economy only gradually, and in adjustment to their production line and special circumstances, otherwise the social tensions certainly concomitant with the transformation may grow unnecessarily high.

Difficulties of the qualitative replacement of labour

A lot of enterprises forced to take the road to renewal will probably face serious difficulties in acquiring a labour force of adequate quality, that is, in replacing the inadequate specialists by good ones. Especially in the case of those in leading positions it is to be expected that they will use their formal and informal relations to defend their position (not to mention those top managers whose appointment and dismissal belongs to the competence of state administrative organs).

That much is certain that, however obvious it may seem, it cannot be a general solution for several reasons to pension off elderly managers (perhaps before the legal age), a means too easily used so far. (This is also indicated by the statistical data according to which the ratio of active earners among graduates in pensionable age—and in general among those in the pensionable age is extremely low in Hungary by European standards.) It speaks against it that, on the one hand, the replacement can be hardly limited to the elderly managers. (What is more, in many cases the elderly managers represent such values and attitudes that their replacement is by no means desirable precisely in view of the renewal.) On the other hand, this procedure would not be decent towards those elderly persons who are still able as well as willing to work. Instead, some of the relieved managers could be employed in bodies established to direct the enterprise administration, while the sphere of activity of others could be transformed in a way that, keeping their leading post, they would, for example, represent the enterprise in the different social organs or, relying on their earlier connexions, they would proceed in matters concerning the conditions of enterprise functioning (such as the obtaining of credits), and so on.

Qualitative replacement in the case of *those not in a leading position* involves as much less social tension as this is not necessarily a come-down, if they can find a post corresponding to their qualification. (It is true, though, that most of those in the fields of research would not like to work in the technical-economic administration of enterprises, and for others the replacement may entail a loss of income.) The crucial question remains, however, to find a solution to the problem of the leading group, if only because the resistance coming from there may be the main obstacle to the emergence of the processes improving the human factor in the economic renewal.

Risk, responsibility, security

In addition to the tension-raising effect of qualitative replacements, the increasing economic and enterprising risk and the necessarily concomitant failures may also cause sharp social conflicts. To mitigate such tensions, first of all today's atmosphere has to be changed in which people of an enterprising spirit are eyed with suspicion from the outset. To dissipate this suspicion, public opinion, as well as the competent state, social, and political organizations ought to be made aware of the idea that rational management is necessarily concomitant with risk, for the taking of which it is necessary that economic

conditions put a real pressure on economic units. It is a further necessary condition that decision-makers need not fear retaliation as a consequence of the failure of one or another of their economic actions, that is, the political and state organs must appraise the economic activities of an enterprise in a complex manner. It has to be noted as well that the ratio of loss-making enterprises will be relatively high in the beginning, exactly because of our having become disaccustomed to risk, and it cannot be expected that the ability of sizing up the real and acceptable measure of risk develops overnight.

A further important condition of the spreading of enterprising attitude is a clear delimitation of the spheres of responsibility. If enterprise action and state decision are intermingled (let us think of the priority development programmes), the state organs affected can hardly be expected to act unbiassed in judging results. They are much more interested in demonstrating success or, in case of difficulties, in trying to secure some special regulation.

The judgement and handling of inequalities in income

Parallel with the increasing role of enterprise, income differentiation will be growing.

Assuming that the existing difficulties of measuring performances—to be taken as a basis of differentiation—are solved owing to the determining role of the value judgement of the market, it is not expedient, already on account of the syphoning effect of the small enterprise sphere, to set an upper limit to the wages payable by prosperous enterprises. Further, it is necessary to raise the relative incomes attainable by enterprise managers.

As for the other end of the scale of incomes, the majority of those we find there are members of "unstable" groups with low work culture, which may be left out of the process of economic renewal. It is a social policy task of prime importance to prevent the enlargement and reproduction of these groups. While the differentiation of incomes is promoted, a system of social policy grants has to be established to support reasonably the groups excluded from the dynamic growth of incomes, thus protecting them from becoming declassed.

References

1. Andics, J.: A gazdaság megújulásának társadalmi tényezői (Social factors of economic recovery). *Magyar Tudomány*, 1981. 4.
2. Falus-Szikra, K.: Some human factors of innovation in Hungary. *Acta Oeconomica*, Vol. 28 (1982) Nos 1–2, pp. 19–36.
3. Kozma, F.: *Az emberi tényező a gazdasági fejlődésben* (The human factor in economic development). Kossuth Könyvkiadó. Budapest 1981.
4. Mezei, A.: *Ilyen gazdagok vagyunk?* (Are we so rich?) Magvető, Budapest 1981.
5. Vámos, T.: Hazánk és a műszaki haladás (Hungary and the technical progress). *Magyar Tudomány*, 1981. 5.

6. Komlósy, E.: Az ipar termékszerkezete (The product pattern of industry). Figyelő, 1981. 44.
7. Ferge, Zs.: *Társadalmunk rétegződése (Elvek és tények)* (Stratification of the Hungarian Society. Principles and facts). Közgazdasági és Jogi Könyvkiadó, Budapest 1969.
8. Jánossy, F.: Widersprüche in der ungarischen Wirtschaftsstructur – wie sind sie entstanden und wie können sie überwunden werden. *Acta Oeconomica,* Vol. 4, (1969) No. 4, pp. 351–377.
9. Kornai, J. *Economics of shortage.* North-Holland Publishing Co., Amsterdam 1980.
10. Varga, K.: *Teljesítmény-motiváció és a kutatófejlesztői munka hatékonysága* (Performance motivation and efficiency of the research and development activity). Akadémiai Kiadó, Budapest 1974.
11. Hegedüs, A.: Economic reforms and the fundamental types of control systems established in socialist countries. *Acta Oeconomica,* Vol. 6, (1970) No. 4, pp. 289–303.

НОВОВВЕДЕНИЯ, ОБЩЕСТВЕННАЯ СРЕДА, ЛЮДСКИЕ ФАКТОРЫ В ВЕНГРИИ

Я. КУТАШ

Основная цель статьи — дать реальную картину людских факторов, их возможностей и ограничений. На этой основе можно дать прогноз того, насколько соответствует уровень образования и качество рабочей силы требованиям будущего и даже уже настоящего и какого типа конфликты могут вызвать отсутствие согласованности.

Согласно статье, недостатки процесса нововведений в Венгрии тесно связаны с уровнем образования, качеством и хозяйственным поведением рабочей силы. В то же время можно констатировать, что общественная среда во многом определила эту негативную ситуацию.

Состав рабочей силы не смог должным образом приспособиться — вследствие радикальных процессов преобразования экономики 1950-х и 1960-х годов — к требованиям современного функционирования экономики (велика степень неконгруэнтной занятости, особенно отстает от требований уровень подготовки руководителей, интенсивность социальной миграции породила также кризис ценностных критериев, низок уровень знания иностранных языков и культуры труда и т. д.). К тому же общественная среда — прежде всего из-за стремления к нивеллированию — не понуждала приспасабливаться к требованиям.

Опыт 1970-х и 1980-х годов также показывают, что процессы нововведений почти совсем не развернулись. Основной задачей на будущее является то, чтобы процессы модернизации, оказывающие благоприятное воздействие и на качество рабочей силы, стали определяющими.

Это требует изменения общественной среды, претворения в жизнь принципа производительности, требований рыночного хозяйствования и т. д., что вынудит к мобилизации имеющихся резервов в рабочей силе.

Кроме того, необходимо подготовиться к тем конфликтам, которые вытекают из отсутствия согласованности между качеством рабочей силы и предъявленных к ней требований. С одной стороны, необходимо сформировать систему качественной смены рабочей силы, которая, оставаясь гуманной, отдавала бы предпочтение требованиям эффективности (сюда относится и «переподготовка» рабочей силы). С другой стороны, политика должна терпимо относиться к новому неизбежному росту различий в доходах, к новому пониманию риска, ответственности, страховки (например, к тому, что неизбежно возрастет элемент неопределенности при хозяйственном риске) и на основе тщательной оценки этих условий сформировать те области, в которых могут применяться «правила игры» экономического обновления.

Acta Oeconomica, Vol. 32 (1–2) pp. 137–160 (1984)

TERMS OF TRADE, ADJUSTMENT PROCESSES, AND THE ECONOMIC MECHANISM
(A quantitative approach*)

J. GOLDMANN–K. KOUBA

The study examines the effects of the upsetting of external equilibrium in small, relatively developed CMEA countries. It investigates how growth strategy is adjusting to new conditions. The authors analyze the passive, restrictive and dynamic stages of adjustment. In their opinion, mobilization of the reserves depends first of all on institutional factors: they compare the characteristics of and experience with the traditional, the partial and the alternative complex ways of approach to the development of the economic mechanism.

For some decades already the interaction between the economic mechanism and economic development under the impact of changes both in the outside world and within the system, has been at the centre of interest of many economists in our countries, including the present authors. [1, 2, 3] Nowadays, in the context of world economic developments and of economic reform, there are two additional reasons why such a research task should present itself with far greater urgency and enhanced theoretical and practical significance.

Since the early 70's, as we know only too well, severe external disturbances have put the economies of our countries in general, and the economic mechanism–traditional or new–specifically, under unprecedently heavy strain, only easing somewhat at the time when this paper was written. The aftermath of the oil shocks, however, will be with us for a long time to come.

As to the economic reform movement: Out of six socialist countries of Central and Eastern Europe** of comparable size and development level, only two, the most developed ones at that, still adhere to the traditional planning and management system. At the other end of the growth league, the development and gradual diffusion of the new mechanism started with one of the poorest countries at that time, reaching the relatively better-off only with considerable time-lags.

*I. *Angelis*, S. *Czesaný*, J. *Kameníček*, J. *Klacek* and A. *Suk* (from the Czechoslovak Institutes of: Foreign Trade, Planning and Management, Marxism–Leninism, Economics, and Fuel and Energy, respectively) advised on various points of this research project. The conventional reservation as to responsibility for misunderstandings and mistakes certainly applies in this case as well.

**The countries concerned include the GDR, Czechoslovakia, Hungary, Bulgaria, Yugoslavia, Poland; by GNP per capita with Poland's position not yet stabilized. (The specific development of reform in that country is discussed in Acta Oeconomica Vol. 30 (1983), No. 1, p. 70.)

While homage is due to the pioneers, in Czechoslovakia –and maybe elsewhere– theoretical work on an alternative system of economic control and practical arguments in favour of new ideas in this field were not made any easier by the new system's existence under complicated conditions in international politics, nor by some of its specific features. Particularly among central planners, with a professional bias towards established methods used for a long time with fair success, and among 'pure theoreticians', not affected by the country's economic ailments under directive planning and external shocks, to say nothing about vested interests proper, there was a predisposition for a learning process, in the given context, at a rather low level. The international repercussions of the ups and downs of economic reform in Czechoslovakia are only too well known.

Likewise, the impact of unfavourable world economic developments on our economies has been thoroughly analyzed already, but no generally accepted result has been obtained as yet. While outside researchers, such as R. *Portes* of London or F. *Levcik* of Vienna, seem to agree that the difficulties of the 70's were, primarily, of exogenous origin, (4,5) in Czechoslovakia –and elsewhere in our countries too– a variety of theories is on offer. External factors are said to have only contributed to unfavourable internal development; alternatively they are interpreted as having unveiled such contradictions as had already been in existence prior to the first oil shock etc., etc. The implications of either research result, of exogenous or endogenous explanation, for selecting an adequate strategy for adjustment and development as well as for a scenario of a short or medium-term forecast need hardly be stressed here.

Disagreement, for some years already, on such a strategic issue, both in theory and in practical considerations, would indicate that non-formalized verbal exposition at one extreme and econometric model-building at the other are not fully adequate to the task of arriving at an agreed solution to a highly complex research task. In an entirely informal presentation, it would seem to us, there are too many threads to keep in hand simultaneously, and to disentangle, while in econometrics the standard error might turn out larger than the variable looked after, or the coefficient of determination so high that one starts wondering what has gone wrong.

With such an experience in research technique so far, a 'compromise' approach has been selected here, somewhere midway between the two extremes resorted to so far. In view of the traditional image of this journal a trivial formalization is relegated to the references. Instead, from experience in presenting our subject matter so far, a system of straight-forward diagrams, included in the text, has been found helpful in scientific communication over the problem in hand.

After this rather extensive introduction we may now pass over to our 'logical model'.

Strategic adjustment to external impulses in a small developed socialist country: the model

For the purpose of analysing a process of destabilization of the external balance, and of deceleration of economic growth, due to transmission of an external disturbance, a number of exogenous factors may be considered. Among them are: deterioration of terms of trade (T/T), increasing debt-service requirements, increasing demands for foreign investment, and–most likely–a combination of negative impulses requiring both short- and medium-term adjustment.

Obviously, in the case of a positive external impulse such as an improvement of T/T etc., the process of adjustment will go into reverse, tending towards an improvement of external and internal equilibrium and, consequently, an acceleration of dynamics for the system involved.

Let us now examine in some detail the process of transmission to–and of diffusion within–an economy of our type, of a T/T-conditioned external shock, together with the subsequent process of adjustment. In order to facilitate our argument some simplifying assumptions will have to be made by way of a first approximation. They will be dropped step by step, subsequently.

In view of the fact that it will hardly be possible to complete the adjustment process in the short-term and without a significant re-allocation of resources, our research task will be one in growth strategy rather than a problem of current economic policy.

Initially, as in any other adjustment process, the response of the system to, say an oil shock, will be necessarily of a passive nature at first, changing its 'state' rather than its behaviour. With the initiative resting with the environment so far, foreign assets will have to be resorted to and foreign indebtness to be incurred. Subsequently, restrictive measures will have to be taken, decelerating or even reducing internal absorptions (domestic uses of the national income) i.e. investment or consumption or both in varying proportions in order to free resources capable of covering the increment of import costs.

It will only be in the medium run that, hopefully, a dynamic solution might be found to expand output in order to cover the real costs of the oil chock.

To use the accepted phraseology, during passive adjustment the country will 'live above its means' while in a restrictive situation more suitable methods will be adopted, 'properly living within ones's means', or trying to do so, at least. Finally, in a dynamic solution we shall have to 'mobilize additional resources'.

Again, in the opposite case of an improvement in T/T, not too unlikely in the situation of 1982–1983 and the following years, a dual option to that of a restrictive adjustment will present itself to central decision-making.

Thus, we obtain four patterns of strategic adjustment to external impulses, negative or positive. They may be suitable as described here –together with some approximation to reality– with the help of a graphical presentation. First, the adjustment process will be assumed to proceed instantaneously, and the time path of the adjustment process will be examined at a later stage.

Passive adjustment

As is usually the case with any system, the first reaction to an external impulse will be effected through a change in the 'state' of the system. Domestic use (I +C) will remain on their trajectory so far; the increment in costs of securing an unchanged import volume will be covered at the expense of the system's state, i.e. at the expense of its assets abroad and later through increasing indebtedness. (See Fig. 1) In this graph the values of both variables are plotted on a semilogarithmical scale so that the slope of the time-path indicates the rate of growth.*

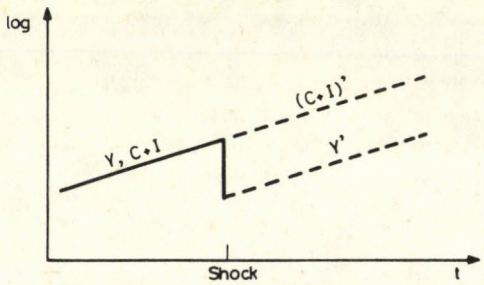

Fig. 1.
Patterns of passive adjustment
(X – M) *foreign contribution*
Living above one's means: $(C + I)' > Y'$

$$\text{Recurrent foreign contribution} = Y - Y' = X\left(\frac{pM}{pX} - 1\right)$$

Accumulated foreign debt at time t (debt service = 0)

$$DBT = \Sigma_0^t (Y - Y')(1 + r)^t$$

*In a trivial formalization the point of issue is a familiar definition from national accounting:

$$Y = C + I + (X - M) \quad (1)$$

(where Y denotes domestic use, C denotes consumption, I denotes investment, X denotes exports, M denotes imports) then, by way of a simplifying assumption:

$$X = M \text{ and, consequently, } Y = C + I \quad (2)$$

Now, an oil-shock is introduced so that for a small developed CMEA country we obtain significantly changed terms of trade, which will equal

$$T/T = 0 < \frac{pX}{pM} < 1.$$

In a first approximation, the adjustment process will be subject to the constraint that the balance of payments ought to remain in its neutral position. A futher simplifying assumption requires that the response of the economy will be instantaneous, without a lag structure. Writing X', Y', (C + I)' for the respective values after adjustment to the external shock, and postulating the flow condition of the model Y' = Y:

Such a passive adjustment with the environment playing the active part, changing the terms of trade will sooner or later come up against the barrier of creditworthiness.* In Czechoslovakia as well as in other countries under investigation this stage was reached, as is well known, about 1976–1978. Non-economic factors, ensuing from the development of international relations, amplified the more or less economic considerations of Western lenders.

Restrictive adjustment

At this stage an active response of the system to the external disturbances will become indispensable, requiring a re-allocation of resources in favour of the external environment. Thus, the increment in costs, in world prices, of the given volume of imports will have to be compensated by a restriction of domestic use. In our graphic presentation their time-path will be shifted–theoretically parallel to itself–downward to an extent equivalent to the additional costs of import.**

In Czechoslovakia and in some other countries under examination an adjustment process of this type proceeded from about 1976–1978 until the terms of trade (with the

Cont.

$$X' = X\frac{pM}{pX}$$

where pM/pX is the reciprocal of T/T after external shock, and the increment of exports

$$X' - X = X\left(\frac{pM}{pX} - 1\right). \tag{3}$$

*A conventional limit is reached when interest and repayment exceeds a value of about 25% of receipts from exports.

**If the value of Y is to be maintained after the external shock, exports will have to be raised to a level of $X\frac{pM'}{pX}$

Similarly: $(C+I) - (C+I)' = X\left(\frac{pM}{pX} - 1\right).$ (4)

Thus, domestic use will have to be reduced by the export increment as given in equation (3). Substituting into equation (1) we obtain the post-oil-shock equation for our definition from national accounting:

$$Y' = Y - [(C + I) - X\left(\frac{pM}{pX} - 1\right)] + [X + X\left(\frac{pM}{pX} - 1\right) - M] \tag{5}$$

showing the extent of re-allocation of GNP.

In this argument no changes in volume of trade in response to changes in relative prices are taken into account as imports largely consist of complementary inputs in production, and exports are determined by import requirements. Dropping the no-credit assumption only spreads the adjustment process over a few years, adding the interest burden into the bargain.

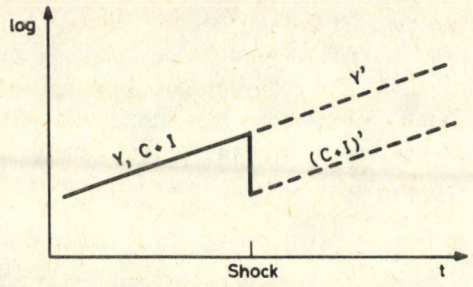

Fig. 2.
Patterns of restrictive adjustment (No feedback effects of C', I' on Y')
Living within one's means $(C + I)' \leq (C + I) - X\left(\frac{pM}{pX} - 1\right)$
$DBT = 0$

West) reached what seems to be their lower turning point. (In 1981, approximately, the Γ/T system went into reverse as far as price relations with the West are concerned.)

On the whole, restrictive adjustment to external shocks, as effected in Czechoslovakia, can be positively evaluated in so far as such a solution is to be taken positively at all–in the short run certainly. After all, the economy of Czechoslovakia changed over from a stage when we were living beyond our means, relying on foreign contribution, to a new stage where we fittingly decided to live within our means, on the whole smoothly, without any significant economic or social repercussions.

Certainly, there does not exist any result in economics that could be achieved for free, without paying for it in one way or another. In our case adjustment was brought about not without some serious imbalances to be overcome, both in the external field and consecutively, in the domestic economy. However, in a relatively short time external equilibrium was achieved, external liquidity and a modest dynamics were restored and equilibrium on the consumers' market even improved. In addition, the debt-service ratio reached the second lowest level in our sample.

Another aspect of the restrictive solution has still to be discussed. We are referring to the argument that restriction of investment means that the burden of adjustment is shifted to the years to come when a gap in the flow of new output capacities will have to be expected. In other words, such a type of adjustment would mean that 'we are living at the expense of the future'.

However, when we examine the future development of the Czechoslovak economy, we soon satisfy ourselves that lack of industrial equipment will hardly set a limit to future growth and development. This is basically true, even if some structural imbalance may develop, particularly in the sphere of 'unproductive' investment, and especially where living conditions and the environment are concerned.

At this point of our exposition a more general conclusion presents itself. External disturbances are immediately transmitted to the boundary element of our system, i.e. its

international sector, denoted (X–M). Here the international terms of trade are transformed into national T/T, according to the specific structure of national trade flows as against their international structure. This process of transmission has to be taken as an objective one, unavoidable in fact, exogenous in relation to the system under consideration. *"Vis major"*, except for the fact that the specific national structure features are determined historically, i.e., by the country's system of planning and management.

The international sector (X–M) obviously has strong connections with the system's internal elements, particularly with those of consumption and investment; indirectly with the manpower element and with fixed assets. Thus, after transmission of the external disturbance it spreads within the system. Now, insofar as intensity and speed of the process of diffusion inside the system are dependent on the given system of planning and management, an interaction of exogenous and endogenous factors will already take place, as shown in some detail below.

Dynamic adjustment

We still have to describe another type of accomodation to an external shock which will take place, if it occurs at all, at a later stage only. Its essence is found as is well known, in an active and dynamic adjustment, in a systematic effort to activate latent resources. The objective of such an accomodation is the endeavour to return the growth path of domestic use to its original slope and to shift it into its original position. For this purpose it will be indispensable to raise the trajectory of GNP above the growth path of domestic use to such an extent that it becomes possible to cover additional outlays on the given import volume from the interspace between the two trajectories. (See Fig. 3)*

An effort to carry the Hungarian reform further in line with original intentions may serve, perhaps, as an example of dynamic adjustment. This holds true even if the full benefits of the improvements in the control system will show up, according to the authors of the reform measures, only gradually.

Adjustment to positive impulse

We may now proceed to a description of the dual of an external disturbance (say in the shape of an original deterioration in the terms of trade followed by an improvement in this parameter). We are referring thus to a positive external impulse, which may, as

*Our model has been constructed with a special interest in T/T (with the West). After all, with a time lag they determine overall T/T; in addition, balance of payments problems (Western) are of specific economic and political significance.

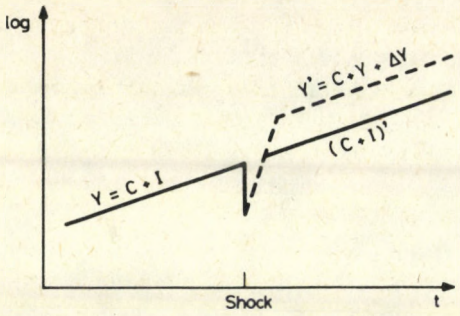

Fig. 3.
Patterns of dynamic adjustment (instantaneous)
Mobilizing reserves: $Y' = Y + DY$

$$DY = \left(\frac{pM}{pX} - 1\right)$$

$$DBT = 0$$

mentioned above, also follow from a starting point other than a shift in terms of trade. (Easing of international tension and deceleration of defence effort e.g.)

The system's reaction to such a positive impulse will analogously take the shape of a change in the initial state of the system; external resources that were largely exhausted in the preceding phase of T/T deterioration will now be replenished again. Starting from the preceding stage of restrictive adjustment, the growth path of domestic use will be shifted –parallel to itself–in an upward direction, and approach the GNP trajectory in order to 'overstep' it subsequently. Then the line of domestic use will lie above the GNP trajectory to an extent to which the costs of the given import volume have been reduced against the preceding level.

A situation we have described just now actually developed in Czechoslovakia, and in some of the other countries in our sample, in the years 1982–1983. According to OECD statistics (re-published in the UN ECE Economic Bulletin of Europe, vol. 35, November 1983) Western terms of trade in relation to the small CMEA countries of Europe (including Romania instead of Yugoslavia as in our sample) deteriorated in recent years from 109 to 91, i.e. by almost 20 percent. Leaving apart the difficult problems of the mirror statistics puzzle [6], we may conclude that terms of trade of the small CMEA countries with the West improved approximately to the same extent.

Strategic adjustment: the time path of the adjustment process

Now we shall have to deal with a more complicated task and describe the time-path of the adjustment process as well as the interaction of the short-term factors that derive from the external impulse with long-term, less marked, but cumulative trends. However,

Table 1

Terms of trade (W) balance of trade (W), change in the rate of industrial output in six smaller CMEA countries and in Czechoslovakia

	1977	1978	1979	1980	1981	1982	1983*
T/T: (W):							
CMEA–6							
(1975=100)	94	92	100	103	110	111	110
Balance of trade (W):							
CMEA–6		–4.3	–3.6	–3.2	–2.2	+0.3	+0.2
Czechoslovakia							
(bn $)		–0.2	0.0	+0.2	+0.3	+0.3	+0.3
Change in industrial growth rate: (percent)							
CMEA–6			–2	–1	–2	+2	+3
Czechoslovakia		–2	–1	–1	–1	+2	+1

Sources: *T/T* – Economic Bulletin for Europe, vol. 35, table 2.1; Czesaný, S.: Sources of Economic Growth, Ekonomický časopis, no. 8/1983, p. 757; Federal Stat. Office; *Balance of trade* Economic Bulletin for Europe, p. 2.41; *Growth rate change:* Stat. Yearbook–ČSSR, Economic Bulletin, p. I. 28.

Note:

*Estimate

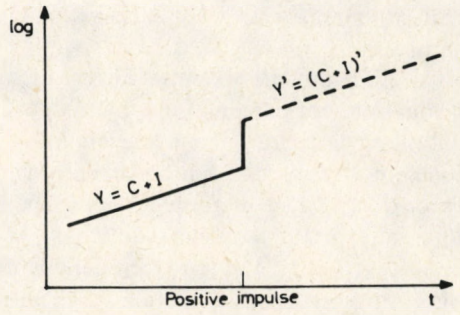

Fig. 4.

Patterns of adjustment to positive impulse (Instantaneous)

$(T/T > 1)$

Harvesting windfall gains: $Y' = (C + I)' = Y + X\left(\frac{pM}{pX} - 1\right)$

$DBT = 0$

an endeavour–which was not always popular–to stress the impact of endogenous factors (economic mechanism) in the constellation of forces examined certainly deserves praise. On the other hand, an interpretation of long-term and low-impact tendencies as short-term and high-impact factors would seem to be somewhat less laudable. In this

context we might remind that ". . . for a researcher facts are what air is for the birds; without it, birds could not fly. Without facts, our theories would be in vain". (From *Pavlov*'s last will to his students.)

There is certainly no doubt that in analyzing internal factors making for destabilization and deceleration of GNP and domestic use we must take into account the negative long-term trend which is generally taken for a result of maintaining the traditional planning and management system. However, adding this declining trend line to the trend representing the results of T/T deterioration hardly will substantially change the picture. The following reasons may be given.

Negative changes in world-market terms of trade which are transmitted to—and spreading within—our economy bring about losses in the rate of growth of some percentage points. On the other hand, the negative long-term trend has an impact on dynamics at the rate of a few thousandths p.a. or less. Thus its effect will hardly be noticeable in the short run. Its true significance follows from the fact that it operates cumulatively, gaining in weight as the years pass by.

However, an important reservation must be attached to our argument at this point, relating to the time path of GNP and domestic use. The above argument would only apply to a comparison of trajectories prior to, and after adjustment, as well as only to the immediate impact of the planning and management system on the adjustment process. However, as we already briefly mentioned above, success or failure of efforts to contain the impact of T/T deterioration, and the intensity and speed of its diffusion inside the economy (to the degree that containment does not succeed) will be determined to a fair extent by the economic mechanism.

In the process of its diffusion the external disturbance will affect, first and foremost, the equilibrium situation, both external and internal, and only through changes in overall or sectoral equilibrium will it bring about deceleration of economic growth and of socio-economic development. Thus, the primary exogenous shock will lead to a secondary disturbance. Through a system of feedback effects this shock may, in fact, become more intensive than the primary disturbance which gave rise to it initially. However, as it might have been avoided, or at least considerably mitigated with different adjustment strategies and with a different economic mechanism, it will have to be regarded as of endogenous character. (See Fig. 5)

In the determination of the time path of adjustment, as between the terminal point of the original trajectory and the starting point of the new one, considerable weight will have to be given in short-term analysis to a number of factors, unknown in the political economy of socialism, as largely taught so far. At a much higher level of decision a number of factors of strategic significance will have to be taken into account that do not turn up at all in traditional long-term economic analysis. Ever since the time of David *Ricardo* [7] and Karl *Marx* [8] (Introduction to the 'Principles' in one case, and 'Theorien über den Mehrwert' in the other) classical theory had to abstract from them. But not ours.

As we shall see in the next section, such a gap in the toolbox of the adepts of 'pure

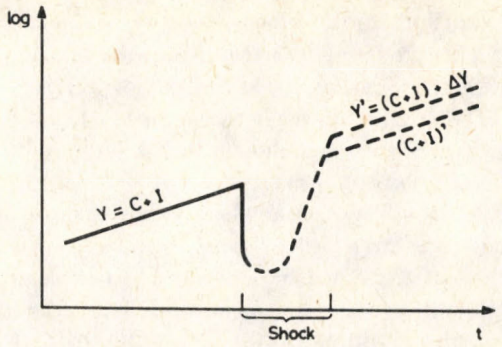

Fig. 5.
Pattern of dynamic adjustment (lagged)
Mobilizing reserves: time lag – *1*

$$Y' = Y + DY$$

$$DY = X\left(\frac{pM}{pX} - 1\right)$$

$$DBT = 0$$

theory' has not prevented some of them from offering expert advice, as it was called, however insufficient their academic and practical qualification for such work was. Unfortunately, to the immense detriment of the economy–and the social fabric–of some of our neighbouring countries, in the investment and capital-importing booms of the late sixties in one country and the mid-seventies, approximately, in the others, it was accepted by the authorities. After all they were only too glad to be offered such promising 'expert' advice, with results on external equilibrium, and otherwise, too, well known already and briefly described below.

Thus, the line representing the growth path of the system in the process of its accomodation to an external disturbance will have a more unfavourable shape than might be expected theoretically from a given T/T deterioration. Secondary endogenous disturbances will be due to expectations, foremost with a tendency towards a positive feedback of an explosive character.

In addition, lags in perception, decision and implementation will not only prolong the adjustment process, but also will cause additional loss of dynamics. As we have noted already, the primary external shock will thus call forth a secondary one, only apparently, but not really of exogenous character. Extensive operation of uncertainty and risk in a shock situation will hardly contribute to an acceleration of the adjustment process.

Of particular importance is the low flexibility and adaptability of an economy under the traditional system of planning and management. After all, it had been developed originally for the specific conditions of a huge country with low import dependence, at a stage of development characterized by absolute priority for the rate of growth at the expense of both equilibrium and efficiency. Thus, it could only amplify the other barriers to the required smooth adjustment of the system to rapidly and intensively proceeding changes in the environment.

By way of an excursion, from what we have said just now an interesting generalization may be inferred, relating to a significant difference in T/T–sensitivity as between small and large CMEA countries. In view of the low foreign trade dependence of a large country a given T/T deterioration will cause an insignificant effect, on the whole. On the other hand, in the case of a small economy, such a deterioration may qualitatively affect the dynamics of internal absorptions.

Thus, our simplistic logical model supplied rather realistic conclusions. Under conditions characteristic of the early eighties, when seemingly a lower turning point in the time path of the terms of trade had been reached, particular topicality was to be ascribed to the fact that a process of adjustment to T/T deterioration is reversible. It applies analogically, but with apposite signs, under conditions of improving T/T. (See Fig. 4)

Quantification

After the oil shock a decline in T/T by about 20 percent in Czechoslovakia, as in Hungary, meant e.g. that–theoretically at least–the volume of exports had to be raised by about a quarter if the volume of imports was to be maintained at its normal level. Otherwise it was not possible to maintain the operation of the economy at the pre-T/T shock level.

A volume of goods and services that has hitherto constituted part of final output, now turned into intermediate product covering the additional real burden of imports. Now, with an import dependence (or export quota) in Czechoslovakia of roughly 0.3, additional exports *'à fond perdu'* were equivalent to a reduction in national income of some 6 percent (20 percent by 0.3).

Because of the low export performance of the economy, the transmission of the external disturbance resulted unavoidably in a reduction in imports, thus calling forth a significant deceleration of growth, of an order of magnitude of some percentage points.

Comparing such a loss in dynamics, owing to exogenous factors, with the long-term effect of an inadequate economic mechanism, estimated in the order of magnitude of a few thousandths p.a. we get a quantitative answer to the problem put forward above. [9]

The external disturbances following 1973 were neutralized for a few years by the usual response patterns: living on foreign exchange reserves and, then, on a foreign contribution in short- and medium-term credits as long as credits were available. Subsequently, the adjustment to changed conditions abroad, both in the T/T and in a cyclical fall in foreign demand, going hand in hand with trade and credit restrictions, was of a predominantly restrictive character. It involved cuts in imports mainly, more contributing to external equilibrium under directive control than import substitution and export drives. With an income elasticity of imports fluctuating about a value of two, deceleration of growth also helped to stabilize the critical balance of payments.

Thus, deceleration was unavoidable, but the adjustment process might have been

shorter and of a less restrictive character. On the other hand, changing the economic mechanism at the time of very serious imbalance might also have been an unpopular and rather difficult undertaking.

From a somewhat more favourable development in 1982 and 1983 it might be possible to conclude–with a due dose of optimism–that recovery, very limited in extent, might be already around the corner. However, such a statement is used quite regularly to justify rejection of anything but fragmentary adjustment of the Czechoslovak system of planning and control.

By the time the present paper is likely to get into the hands of its readers, the issue of recovery *vs.* random deviation from a continuing negative trend will be settled already by the persuasive logic of facts and figures. Yet, the results of an analysis of stabilization and acceleration might be of interest nevertheless. As shown in *Table 1* in more detail, the facts of the case are essentially:

- T/T going into reverse (with real raw-material prices in many cases at the lowest level since World War II.);
- an active balance of trade with the West in 1982 and 1983 likewise, of about $ 500 million, facilitated by T/T developments;
- Western debt service ratio for Czechoslovakia declining to a level which is second lowest in the six countries under review;
- liquidity ratios with Western banks improving remarkably;
- a rise in the rate of industrial growth to about 2 percent in 1983 against 1 percent in 1982 and minus 1 percent the year before;
- consequential rise in both labour and capital productivity;
- a tendency towards stabilization of the consumer's market with sectoral balance, as well as, in principle, structural equilibrium.

This was a result of both reduced tension and a more flexible retail price policy combined with restrained income growth. All this was accompanied by structural imbalance in housing and some other services; in particular there was a chronic imbalance in assortment, nullifying to some extent the positive developments in the consumer's market, as shown below.

Our analysis would thus show that some improvement in external and internal equilibrium, in dynamics and, consequently, in productivity is again primarily of exogenous origin just as were the preceding years of trouble. The 'improved' system of planning and management would appear as a rather innocent factor in this development. However, improved equilibrium conditions, or relaxed tension, if they were to continue, might bring about conditions more favourable for a reform of the economic mechanism. Even if short-term motivation might be weakened again.

Our conclusions may be supplemented usefully by empirical data, relating to more recent developments. (See *Table 1*) Preliminary statistical examination of the situation seems to confirm the original interpretation of T/T changes as the primary, in the short term decisive, factor in external equilibrium and–spreading hence to the internal elements of the system–of economic dynamics. With the movement of T/T going into

reverse after 1981 or so, and with severe restrictive policies, the external position is improving; so is the dynamics of the system.

Moreover, in Czechoslovakia at least, equilibrium in the decisive consumers' market is likewise improving. At a time when output was actually decelerating and even decreasing, a more rational flexible retail price policy was another strategic factor in stabilizing the economy. Thus refuting text-book propositions of 'pure theory' to the effect that equilibrium was solely a function of supply, and price elasticities a subject to be studied, if at all, in the economics of capitalism.

Such a development in balance and growth recovery was bound to come as a surprise, particularly for some of our purely theoretical economists, with a typical perception lag. In fact, confronted with statistical data some of them declared that a misprint must be involved. Facts, however, have a specific character in so far as they cannot be disputed away, however difficult their economic interpretation may be.

Certainly, T/T statistics are particularly sensitive to interpretation as they imply the quality problem in index number construction in addition to, frequently, the 'mirror statistics puzzle'. Different statisticians are bound to supply more or less differing results. Nevertheless, basing our argument on OECD data it seems to be legitimate to infer that a situation of 'harvesting windfall gains' *(Fig. 4)* has, apparently, materialized, amplifying the effects of restrictive policies and export drives, resulting in a state described by the ECE Secretariat as follows: "... the capacity to adjust, generally with relatively short lags, was demonstrated by most East European countries. In particular it showed that these countries could reduce imports and in certain cases push exports to meet requirements of the external balance, as the old view has held". [10]

Referring to the special case of Czechoslovakia, it may be that national T/T developed less favourably than international data for the relation Western countries–ECE 6 would indicate. (ECE 6 is identical with our sample of CMEA countries except for the fact that Romania is included while Yugoslavia now remains outside.) However, the figures given by OECD for 23 Western countries in relation to our group as a whole constitute a weighted average of national T/T for the six individual countries. Thus, a Czechoslovak downward deviation from the published average can hardly be of a significant size. Otherwise, it would have to be compensated by even more favourable figures for the remaining countries in the group. This would apply particularly to the GDR, Hungary and Poland as the remaining major participants in foreign trade in the group, which is a rather unlikely proposition.

Rather striking changes in external liquidity data, likewise, give reason to suppose that a large T/T-sensitivity in some of the countries under conditions of T/T improvement is a relevant factor in recent developments. True, after the second oil shock some oil product exports to the West may have improved the T/T figures. However, their weight in total exports to the West, and the share of oil in total costs would seem to be rather low to supply a sufficient explanation for the T/T recovery. Anyhow, oil product prices have been declining in recent years.

After all, as the international T/T deterioration for developed countries was

accompanied, initially, by a corresponding decline in Czechoslovak T/T, it might be assumed *a priori* that a reverse movement should again proceed in parallel, to some extent. Certainly, *a priori* considerations will have to be confirmed or refuted by empirical analysis in more detail than is possible in a general paper.

From figures on total indebtedness, debt service ratios, and liquidity data it is apparent that Czechoslovakia comes out second-best (or above average, at least in one case). Such a result is rather surprising for an economy with the strongest contra-indication against the directive management system and the leading personnel still being strongly under the influence of the acute anti-reform climate of past years and its aftermath in behaviour patterns. This puzzle brings us to our last point–that of comparative growth strategy.

The strategic framework

As rightly stressed by *Köves* and *Obláth* [11] we have to "regard the formulation of a long-term economic policy conception a high priority task which would make possible to avoid the coming true of the... dangers objectively inherent in the presently acting processes, and would provide a framework for making short-term decisions on the others." Accordingly, a development strategy should be conceived as a system of long-term aims and objectives on the one hand, and of available resources together with actual or perspective constraints on the other. This system would have as its objective function the achievement of such a combination of ends and means that would maximize economic welfare, both in the short and the long-term. As distinct from current economic policy, it should operate over a longer time-horizon, with larger resources, as well as on a wider front. Its *raison d'être* would be, as noted above, to secure consistency of current decision-making with long-term aims.

Referring to Czechoslovakia and Hungary, conditions to a certain extent analogous, both in the international environment and internally, might have been expected to generate an analogous development strategy. A fairly high degree of conformity in the selection, interdependence and relative weights of objective and instruments might have been assumed. Yet, while such an expectation is confirmed in general, there are significant exceptions.

Both logical reasoning and bitter experience, not only in Poland, the GDR and Yugoslavia, would seem to show the opportunity cost concept to be applicable not only in the allocation of scarce resources to competing ends, but in the selection of ends as well. Almost two decades ago it was found in Czechoslovakia that one target (rushed forced growth), of high priority in the past, could now only be achieved at the expense of other objectives: external and internal equilibrium, overall efficiency as well as environmental improvement and resource conservation. They may be of higher order in the hierarchy of ends and means. Still higher up the pyramid is one of the ultimate goals, maximum economic welfare. On the road there rushed (forced) growth has been found to

be a blind alley. In Czechoslovakia, applying some results of Kalecki's work, rational selection of the growth rate and a corresponding stabilization of the rate of investment began to be accepted in central decision-making already in the mid-sixties and has been adhered to, virtually ever since. [12]

As is well known, such a growth strategy should, by and large, have a corresponding effect on further strategic options. They include a decision (largely predetermined, in fact) as between extensive *vs.* intensive growth–not yet implemented as yet to any significant extent. In addition, there is a choice as between restrictive against dynamic strategy, particularly under conditions of balance of payments contraints. Moreover, a decision has to be taken in favour of autarkic strategy or of a policy of opening the economy, both towards the West and the CMEA countries. Likewise, there is an option in favour of a highly selective *vs.* a predominantly balanced structural strategy. Finally, there is a rather technocratic, solely growth oriented strategy *vs.* a standard-of-living orientation, to a lesser extent focussing on material production than–in line with consumer's preferences–on services, living conditions and environmental improvement.

Necessarily, however, innovation is coming up against the forces of inertia and tradition. There are economists–not only in our country–who in their orientation regarding ends and means still seem to live in the years of industrialization. To some extent such a tendency is only to be expected; through introspection and a recall of nostalgic memories of a great time to live in, the authors fully realize that reorientation is not as easy a job as it might appear to the younger generation.

Again referring to Czechoslovakia and Hungary, against resistance just noted, the following developments in strategy in one or the other country deserve to be presented here:

- a thorough reform in Hungary in 1968 and 1979 as against a reform treadmill in Czechoslovakia with the first 'reform' in 1958 (soon forgotten) and one again in 1980, with laborious, but not very instructive experiments preceding the fragmentary undertakings;
- stabilization of the investment rate in Czechoslovakia, virtually from 1965 onward, with growth stability until the late seventies, [13] and the second lowest debt-service ratio of the countries examined. Backsliding into a largely foreign-financed new investment boom contributed to high external indebtedness elsewhere;
- legalization, in principle, of the secondary economy in Hungary against a rather cautious, perhaps too cautious, one in Czechoslovakia;
- consistent consumer-oriented strategy from 1956 onward in Hungary, *vs.* a propensity to traditional allocation, in Czechoslovakia, of investment, of current output, and foremost, of the planners' attention to the so-called productive sector at the expense of living conditions and environmental protection. From the Hungarian experience the following developments deserve a special attention;

  a) an economic mechanism adequate, basically, to present conditions,
  b) an active standard-of-living policy, both generally, and:
  c) in relation to the secondary sector specifically. [14]

Hungary may learn from the Czechoslovak growth strategy that has contributed towards stabilizing the economy for some time already. Two-way exchange of scientific information and improved knowledge of what is going on next door might be instrumental to improving the performance either side.

The rather favourable T/T-situation should not be overlooked in this context. After all an upward shift of, say, three percentage points is equivalent to an increase in domestic use of one percentage point in the case of Czechoslovakia (and of one and a half percentage points in the case of the economy with higher foreign-trade participation) entirely 'free of charge' at that. Our analysis has shown that the larger the foreign trade dependence of a given country, and the more unfavourable the T/T for this country becomes (for structural reasons, e.g.) the higher its T/T-sensitivity will be. The more can be expected, *ceteris paribus,* to gain as far as the real burden of both external debt and debt-service is concerned from an upward movement of this parameter. For a smaller economy of our type T/T-sensitivity assumes a strategic character.

The role of the economic mechanism in the context of a development strategy in the aftermath of T/T-disturbances

Notwithstanding what has been said in the concluding remarks of the preceding section, the small developed countries of Central and Eastern Europe cannot rely on 'windfall gains', accruing under certain favourable conditions from an exogeneous T/T-improvement. Nor could they continue in passive adjustment that would enhance the risks inherent in a rising debt-service and might lead to a cumulation of troubles. A restrictive adjustment does not present a satisfactory solution either. Certainly, it might have some alleviating effect and temporary benefits of a palliative character. However, restrictive policies followed for a prolonged period would have an adverse impact on the growth of resources in addition to complicating the transition to active and dynamic adjustment.

In this respect, experience accumulated in recent years is already pointing to some alarming and momentous inferences, showing up in economic analysis.

It was only with a considerable delay that the countries under examination reacted to new external developments only to underestimate, subsequently, their full impact in the medium or long-term. Late and incomplete diagnosis of the interaction of external and internal factors was a factor contributing to a situation where adequate changes in growth strategy failed to be carried out in time. Thus, our countries decided only belatedly–if at all–in favour of economic re-orientation and of a reform of the economic mechanism other than a fragmentary undertaking. The anti-reform climate of the 70's contributed to stagnation in economic reform movement in Czechoslovakia.

It was in the early 70's that Czechoslovakia abandoned its programme of implementing a comprehensive reform and introduced gradually, in several steps, a modified version of a fully centralized system of economic control. The course of

economic development was subordinated to a large number of national and ministerial priorities, and capital-intensive programmes. Large associations of enterprises ('productive-economic units') as basic echelons of economic management compulsorily integrated all state-owned enterprises. Both at the centre and at the level of the 'productive-economic units' the system of allocating inputs in physical terms on the basis of 'material balances' was restored, to be further expanded soon.

As a result of the *de facto* restoration of the traditional system of planning and management in Czechoslovakia a chance was missed for a parallel development of an alternative type of economic control in two rather small CMEA countries. In Hungary, however, such an alternative type of the functioning of a socialist economy developed successfully in the years 1968–1972. As a result of both a realistic, rational economic policy in general, and of the reform process some positive results have already been secured. However, because of rather complex external and internal conditions, the reform program came to a halt, stagnating in the years 1972–1978. [15, 16] Informal recentralization called forth contradictory enterprise behaviour, as well as strengthening tendencies of inertia that resulted in negative phenomena similar to those under the pre-reform system. [17, 18]

In the GDR the development, and step-by-step process of organizational arrangement of a centralized system of the *modus operandi* was based upon setting-up large economic units of the 'Kombinat' type (VVB) with a predominantly hierarchic break-down of plan indicators, an elaborate, material-balance-based system of input allocation, and an essentially autarkic price-setting.

In the operation of the Polish economy, large economic units (WOG), likewise, became the basic organizational units while programmes for the reform of the economic mechanism remained at the level of declarations of intent. Moreover, the traditional system of planning and control was bound to amplify the negative effects of the selected strategy of economic growth, contributing to phenomena of economic crisis of unprecedented intensity and duration.

The *modus operandi* selected in the case of Czechoslovakia, the GDR and pre-reform Poland narrowed the scope for adopting both an effective growth strategy and a current economic policy securing strategic adjustment to negative developments in the outside world as well as inside the economy, characteristic of conditions in the 70's. On account of antistimuli, inherent in the system of planning and control, a programmed export-orientation of economic policy failed to be implemented. Thus, reliance had to be placed, more and more, on restrictive and import-saving policies.

Later on, the revival of interest in a reform of the *modus operandi* has been a reaction to the negative experience of the anti-reform climate of the 70's. Depending on specific conditions (i.e. a specific approach to an evaluation of experience from preceding attempts at fragmentary reform, and the degree of preparedness of the leading personnel likewise) the changes in the system of planning and control in the countries concerned exhibit specific features. Decisive factors for selecting the type of changes in the control system include the will-power and strength of decision of central authority, the power

relations between the supporters and opponents of institutional change, tradition of management style, accepted values and national culture. Foremost, the degree to which the urgency of the economic situation, and of both short- and long-term perspectives was adequately appreciated in economic analysis and successfully communicated to central authority was bound to exert an overwhelming effect. Facts and developments that are not identified in research in their full implications, and not included in the effective information input of those above, are necessarily of no relevance to the central decision-making process, however serious the consequences may be. Polish experience may serve as memento on the wall.*

Late in the 70's and in the early 80's, as we noted already, two types of strategic adjustment to new conditions through the economic mechanism could be observed in the countries under investigation. [19, 20] The first one is aimed at 'perfecting'–step-by-step–the traditional working arrangements of the economy. In a fragmentary way it would–to some extent–modify selected fields of the economic activities carried out by the enterprise, such as investment activities, scientific and technological development, foreign trade operations etc. A series of so-called experiments in selected enterprises and branches usually precedes the implementation of the perfected forms of control.

Such a type of institutional re-arrangement aims at reducing–formally at least–the number of directive planning indicators that are subject to a hierarchical breakdown. It is oriented towards 'optimization' of the proportion between indicators in physical units and in value terms. An endeavour to enhance the role of medium-term plans is linked up to an attempt (in a world of constant change) to control the enterprise's activities through stable long-term 'normatives' of individual and collective stimulation through (mainly) output-oriented premia, as well as profit-sharing.

However, what actually happened under such a type of rearranging the *modus operandi* presented a rather contradictory picture. The process of implementation, so far, of the set of measures for perfecting the system of planning and managing the economy of Czechoslovakia following 1980 may serve as an example. Formally, the mandatory character of planning indicators is considerably reduced or abolished altogether. However, in the process of the actual breakdown of mandatory, orienting, or informative planning indicators, a total of 300 to 700 items is reached at the level of the associations (or combines) and enterprises. The number of 'material balances', in physical units, for allocation of inputs may be as high as some hundreds. In the process of the hierarchical breakdown of the plan they serve as the basis for input allocation under a rationing system. Stable medium-term 'normatives' were found, as might have been expected

*"The basic source of such deformations is to be found in the common practice of taking basic strategic decisions by one person and on the basis of limited documentation against the use of scientific expertise which often was prepared ambiguously with the only objective of confirming decisions taken beforehand and not as a basis for decision-making" (in Polish) Report of the Polish Government. *Trybuna Ludu* June 1981.

theoretically, impossible to realize. Within a framework of (formally) unified rules the control over the associations and enterprises is individualized, quite frequently, according to the lobbying strength of enterprises, and their compromise arrangements with the central planning authority.

Application of such a type of re-arranging the *modus operandi* could bring about only isolated results. It would rather become instrumental in implementing restrictive economic policies, called forth in the given T/T and balance-of-payments situations. What is looked for is an improvement in information supply under a management system that is hierarchically structured, as well as elimination of some, obviously negative stimulation. Creation of a significantly more favourable climate of interests favouring socialist entrepreneurship is beyond the reach of attempts at improving the traditional economic mechanism, dependent as it is, on the open problem of taking transitional steps towards innovation of the economic control system.

Crossing the Rubicon of the traditional system of planning and control foremost requires that a difficult learning process should be mastered successfully. Selection of an untraditional way of re-arranging the *modus operandi* is, gnoseologically, based upon a critical assessment of the unsatisfactory effects of attempts at fragmentary reform that have failed to come up to expectations. Such attempts at reform can be observed in several waves, synchronized or separate, in all our countries.

The traditional working arrangements of an economy of our type lead to an atrophy of the principle of economic calculus. As a result, economic development will suffer from inherent degenerative processes. In the operation of the economy they show up in an unsatisfactory flow of innovations, low quality, high costs of production, unsatisfactory export performance in addition to chronic shortages of some goods and services as against oversupply of others. In a wider context of social relations the status of good work is devalued.

Such disfunctional attributes cannot be compensated by economic reorganizations, through reconstruction of the system of criterional indicators nor by modifications of the traditional institutional framework in which the economy is operating.

From these experiences and their evaluation the principles and the programme for the development of an untraditional type of reform were derived in several of our countries.

As we know, a reform was carried out in Hungary in the years 1968–1972; after a period of stagnation between 1973–1978 another stage of reform was started in 1979. An essentially analogous programme began to operate in Bulgaria as from 1979. Under difficult social and economic conditions Poland accepted a similar type of reform programme as from 1982. [21, 22, 23, 24, 25, 26]

The alternative type of a *modus operandi* in the countries under examination exhibits some common or similar untraditional characteristics according to objectives pursued. Their point of departure is in the empirical lesson that the assumption according to which under normal conditions economic agents at the grass-root level can be controlled by an almighty central authority has to be relinquished. In lieu of such ar

arrangement the alternative type of a control system rests on articulated individual and group interests, as well as national interests, endeavouring to co-ordinate the economic agents by means of obligatory rules of decision-making and planning on the basis of macroeconomic regulation. The underlying idea is not only decentralization of decision-making but, simultaneously, acceptance of certain self-regulating feedback mechanisms of co-ordination, characteristic of market-type economic structures.

The objectives of modifying the working arrangements would be as follows:

- abolition of the mandatory and allocating function of the plan, and of the hierarchical breakdown of output quota with central allocation of inputs;
- transition to flexible price formation based on economic calculation;
- abandonment of autarkic price systems and transition to the principle of import-export pricing;
- securing independence for enterprises, which work out their own output programme on the basis of contracts with their customers;
- profit achieved from the sale of products in home and foreign markets to become the main success criterion for the activities ef enterprises;
- transition to normative wage regulation in dependence on individual performance, and on enterprise results;
- reducing the central allocation of investment grants and decentralizing investment decisions to some extent, according to the principle of self-financing;
- transition to normative standard taxation;
- restriction of redistribution processes, financial supports and subsidies.

Such an incomplete inventory of objectives only covers steps to be taken in the initial stage of the reform; even assuming their full implementation they can only produce limited results. In a somewhat confused view, similar initial steps towards reforming the control system were already interpreted as a 'target solution'. This interpretation would only veil the exacting logic of their gradual development and the long-term character, not fully acknowledged yet, of changes in the mechanism within the general framework of the development of socialist society.

We do not consider justified a dichotomy as between evolutionary and radical changes in the *modus operandi.* An alternative type of *modus operandi* cannot develop otherwise than in an evolutionary way. True, such evolution may be conceived in different variants depending on the given conditions of the economy.

Changing over to a complex innovation of the working arrangement requires that we should transgress certain threshold values in the shape of a set of measures conceived of as an interdependent system of successive steps, and not of isolated 'experiments'.

Accepting the above characteristics of comprehensive economic reform as a point of reference for examining attempts at 'perfecting' the traditional system of planning and management, we find some agreement, in intent at least, as far as input information is concerned, such as prices, wages, interest rates, taxation etc. on the one hand, and disagreement in the cardinal need for abolition of command, substituting for it profit, as the only success criterion and motivation, on the other.

Thus, attempts at perfecting the traditional model would to some extent rationalize information input, but would preserve unchanged motivation. To use a metaphor, such an approach would resemble a procedure under which the tourist's sign-posts are improved, leaving however his undesirable destination unchanged.

Primarily, changes in the economic mechanism would have to secure an improvement in overall economic efficiency. Adjustment in the macroeconomic sphere, by itself, would hardly be sufficient to implement this objective. A basic precondition of success is to be found in a gradual change in behavioural patterns of economic agents at the microlevel.

Selecting appropriate ways and means for an evolutionary formation of an alternative framework is a precondition of a radical transformation of enterprise behaviour. Substantial change in behavioural patterns of economic agents at microlevel is conditional upon some organizational and institutional adjustment at various levels of the decision-making hierarchy. Under such adjustment the enterprise would be responsible –under exacting conditions–both for its growth and its survival. Changing the behavioural patterns of the enterprise is a matter of long-term character. In particular, it is dependent upon creating an exacting environment under a hard budget constraint under which the state will no longer guarantee survival of inefficient enterprises. A hard budget constraint is economically feasible, if not always achieved in the household sector. However, an exacting environment cannot be attained through restrictive policies only.

The development of institutional changes for an alternative type of working arrangements of a socialist economy, forming an organic element in the formulation of a new development strategy comes up against a number of potential barriers and open problems, unsolved so far. The difficulties involved in their satisfactory solution, capable of implementation, are intensified as a result of an apparent paradox: programming of an economic reform will usually coincide with a situation in which the economy is in a state not expected beforehand and not too favourable for a thorough reform of the economic mechanism in view of external and internal imbalances.

Such facts call for some moderation in our aspirations. An economist is not engaged in finding a way to the 'land of promise' nor in making unrealistic promises of a Messianic message. It is the business of the economist to analyze the disfunctions of the given economy, and to investigate the preconditions for bringing into action more favourable trends of economic development. Such function, however, would also imply responsibility for a qualified estimate of the costs and expected benefits, as well as information on the problems and difficulties which always accompany the implementation of an alternative type of working arrangements, and the transition, in general, to a new development strategy.

Discussion about the still open problems of a development strategy from a point of view of differing approaches and different experience renders it possible further to improve our answers to questions already known, as well as to formulate new problems in time, under changing conditions.

References

1. Goldmann, J.–Kouba, K.: *Economic growth in Czechoslovakia.* Academia, Prague 1967.
2. Goldmann, J.–Kouba, K.: On János Kornai's Economics of shortage (in Czech). *Ekonomicko-matematický obzor,* Vol. 18 (1982), No. 1.
3. Kouba, K.: The economist and the land of promise (in Czech). In: *Modelováni složitých společenských objektů.* Brno 1983.
4. Portes, R.: The effect of the world economic crisis on the East-European Economies. *World Economy,* 1980, No. 1.
5. Levcik, F.: *Crisis in Eastern Europe?* Wiener Institut für Internationale Wirtschaftsvergleiche (WIIW), Vienna 1983.
6. United Nations, Economic survey of Europe in 1982. New York 1983, p. 257.
7. Ricardo, D.: *Principles of political economy and taxation.* London 1932, Chap. VI. On profit, Note 2.
8. Marx, K.: *Theorien über den Mehrwert.* Teil I. Dietz Verlag, Berlin 1956. Kap. 1.
9. Goldmann, J.: The role of investment in the context of Kalecki's model of economic growth under socialism. In: Matthews, R. C. O. (ed.): *Economic growth and resources.* Vol. II, London 1980.
10. United Nations, *Economic Bulletin for Europe.* Vol. 35, 1983. p. 235.
11. Köves, A.–Oblath, G.: Hungarian foreign trade in the 1970's. *Acta Oeconomica,* Vol. 30, (1983) No. 1, p. 108.
12. "Maintaining productive accumulation at a constant share, approximately, of national income..." CPCz. Central Committee, May 1967. (in Czech)
13. Goldmann, J.: From instability to stability of economic growth in Czechoslovakia (in Czech) In: Kupka, V. (ed.): *On macroeconomic analysis of the reproduction process in CSSR.* EÚ ČSAV 1982, pp. 48–72.
14. Kornai, J.: Comments on the present state and the prospects of the Hungarian economic reform. *Journal of Comparative Economics,* 1983, Vol. 7. No. 3.
15. Bognár, J.: Reforma i zaufanie. (Reform and confidence) *Polityka,* 1982, No. 26.
16. Bognár, J.: A gazdasági reform szerepe a szocialista társadalom fejlődésében (The role of economic reform in the development of the socialist society). *Társadalmi Szemle,* 1983. No. 2, pp. 55–60.
17. Bauer, T.: Protivorechivost v polozheniyi predpriyatii v vengerskom khozyaistvennom mekhanizme. *Acta Oeconomica,* Vol. 14, (1975) Nos 2–3.
18. Kouba, K.: Regulative and systemic aspects of the Hungarian economy (in Czech). In: *Ekonomické modelování. Sborník referátů* , ČSVTS–SBČS, Praha1982 (1).
19. Szamuely, L.: Dva doklada o khozyaistvennom mekhanizme v Vengrii. *Trends in World Economy,* No. 44. Budapest 1983.
20. Csaba, L.: Economic mechanism in the GDR and in Czechoslovakia. *Trends in World Economy,* No. 46. Budapest 1983.
21. Tardos, M.: Development program for economic control and organization in Hungary. *Acta Oeconomica,* Vol. 28, (1982) Nos 3–4.
22. Antal, L.: Thoughts on the further development of the Hungarian mechanism. *Acta Oeconomica,* Vol. 29, (1982) Nos 3–4.
23. Nyers, R.: Tendencies of tradition and reform in CMEA cooperation. *Acta Oeconomica,* Vol. 30, (1983), No. 1.
24. Filipov, G.: Ikonomičeskijat za upravlenije na narodnoto stopanstvo prez VIII. petiletka. *Planovo stopanstvo,* No. 2, 1982.
25. Baka, W.: Polska reforma gospodarcza, *PWE,* Warszawa 1982.
26. Kouba, K.: Alternative type of re-arranging the institutional framework of the small economies in the CMEA region (in Czech). In: *Semináře 1982. Komplexní modelování.* Praha 1983.

УСЛОВИЯ ТОРГОВЛИ, ПРОЦЕССЫ ПРИСПОСОБЛЕНИЯ И ХОЗЯЙСТВЕННЫЙ МЕХАНИЗМ

(Количественный подход)

Й. ГОЛДЬМАН–К. КОУБА

В статье рассматривается влияние нарушений внешнеэкономического равновесия на экономику малых, относительно развитых стран, членов СЭВ в 70-ых годах. Предмет исследования — это приспособление стратегии роста к новым условиям. Авторы анализируют пассивную, рестриктивную и динамическую фазу приспособления. По их мнению, активизация резервов зависит прежде всего от факторов институционального характера: сравниваются черты и опыт традиционных, фрагментарных и альтернативных комплексных подходов к развитию хозяйственного механизма.

JOSEF GOLDMANN

(3. 5. 1912–9. 3. 1984)

While revising the text of the present article the editors received the news from Prague that one of the authors, Josef Goldmann, had suddenly died.

Josef Goldmann studied economics in London and graduated in law in Prague. During the occupation of his country by Nazi Germany he worked in Britain with the famous Polish economist Michal Kalecki whose ideas influenced his way of thinking for all his life. In the emigration he joined the Communist Party of Czechoslovakia and entered the economic commission of the London leadership of the Party.

In the first post-war years he worked in the economic department of the party headquarters, headed the newly formed Institute of Economic and Social Research and represented his country at the new Council of Mutual Economic Aid in Moscow. He contributed to the elaboration of the two-year (1947–1948) and first five-year (1949–1953) plans. While being a deputy chairman of the State Planning Commission, he was arrested in 1952 and sentenced in one of the trials of the Stalinist period.

Released only after eight years in prison and having worked three years in a factory, he returned to professional life to the Institute of Economics of the Czechoslovak Academy of Sciences in 1963. He founded a research team there which dealt with mostly short-term economic analysis of the Czechoslovak economy. Czechoslovakia of the mid-sixties, with the economy's sudden recovery from the deep crisis of the early sixties, with the combined negative effects of an inadequate economic policy enforcing rapid growth and high rates of investment and of the centralized planning system was a fertile soil for rethinking Marxist economics. While many colleagues emphasized the ill-func-

tioning of the economic system, Goldmann focused on economic growth and disequilibria.

Both approaches were combined in his book written together with Karel Kouba (his co-author of the article published in the present issue) Economic Growth in Czechoslovakia, published in 1967 in Czech, 1968 in English and 1970 in Hungarian. Less involved in the preparations for the 1967 economic reform and the political movements of 1968–1969 than most colleagues he could continue his work together with the rest of his team during the seventies. He wrote two more books on macroeconomic analysis, forecasting and economic strategy (the first published 1975 in Czech and 1977 in Hungarian, the second finished just before his death) and contributed to several joint publications with the members of his team. He was one of the very few economists in Eastern Europe who founded a school.

Josef Goldmann enjoyed an international reputation but had particularly close contacts with Polish and Hungarian economists. He was the first author in Eastern Europe who drew his conclusions from a parallel analysis of several CMEA economies. His work had a strong influence on economic research in Poland and Hungary too – he was one of the few internationalists in the true sense of the word.

T. BAUER

Acta Oeconomica, Vol. 32 (1–2) pp. 163–174 (1984)

REVIEWS

THE EFFECT OF PRICE INCREASES ON THE AVERAGE FOOD CONSUMPTION AND ON THE NUTRITION STANDARDS OF SOCIAL GROUPS IN HUNGARY

R. VERSZTOVSEK

It is a general characteristic of food consumption that it is not sensitive to changes in incomes and prices. The ratio of food consumption in total individual consumption, or, in the total expenditure on consumption is decreasing year by year, that is, Engel's law asserts itself.

But, has not the tendency of long years changed under the impact of the higher price increases of recent years? As a matter of fact, while prices have been growing considerably, the growth of average real incomes and real wages has slowed down, and temporarily even stopped, what is more, there have been decreases.

According to *Table 1,* after 1975 the share of food consumption has somewhat

Table 1
Development of the per head ratio of food consumption
(percent)

Denomination	1960	1970	1975	1980	1960	1970	1975	1980
	at current prices				at 1980 prices			
Share in total consumption	39.7	34.4	29.9	29.2	42.4	35.0	32.6	29.2
Share in purchased consumption	37.1	35.9	32.5	32.6	39.7	36.9	35.1	32.6
Average yearly decrease or increase of the share in total consumption		−1.38	−1.38	−0.23		−1.73	−0.93	−1.06
in purchased consumption		−0.33	−0.99	0.03		−0.73	−0.50	−0.73

Source: Author's computations using the data of the study [1].

decreased in total at current prices, while its share in purchased consumption has practically been stagnating. Behind this nominally expressed "steadiness", however, changes have taken place in real terms: the share of food consumption has considerably reduced, as shown by the data computed at comparable prices. What is more, at comparable prices the share of food consumption in purchased consumption has been decreasing faster than during the preceding five-year period.

The processes and rates show that Hungarian consumers try, even under changed income and price conditions, to maintain the global structure of consumption developed in an earlier period and to further pursue its basic tendency. Of course, consumers can achieve this aim only if they make such structural changes *within the main groups of consumption* as are apt to counterbalance the disadvantageous effects of incomes and prices. This question has been examined among others in the Research Institute of Internal Trade. Consumer behaviour during the years 1975 to 1980, a period which may be called "critical", has been investigated. In the present article, a few of the results of this investigation are presented.

The (nominal) increase in value rooted in the price changes

In 1980 the average consumer price index of foodstuffs was 150.5 percent in comparison with 1975, while that of total consumption "only" amounted to 135.6 percent.* This means that the relative price index of foodstuffs was of such extent (111 percent) as would in itself have justified considerable structural changes in total consumption, if only because the index of personal real income only amounted to 107.4 percent during the same period.**

Official decisions raised the price of several groups of foodstuffs every year between 1976 and 1978. This affected practically every group of products except flour and baker's ware, and price increases fluctuated between 10–50 percent. This was followed by the price measures of the 23rd July 1979 which raised the price level of foodstuffs by 24.8 percent. In 1980 there was no rise in food prices; the price index reflects the effects spreading across from 1979.

In the second half of the 1970s price increases were highest with the following products: meat 89.1 percent, catering 88.7 percent, sugar 83.3 percent, fish and tinned fish 60.3 percent, meat products 53.3 percent ([3] p. 7).

Price increases of such extent were bound to affect the level and composition of food consumption. In the present article we are dealing only with the effects to be felt in a medium term.

*Author's computation based on the data of publication [2] p. 29.

**Author's computation based on the data of publication [2], p. 20.

In order to find out, in which group of products the change in consumption is the most closely dependent on changes in prices, first the question had to be clarified, how the share of each group in consumption developed at the new relative prices of food, and what role was played in this by the changes in prices.

According to the data of *Table 2,* the quantitative increase of per head food consumption was much smaller than the increase in value: the index of the former is only 102.6 percent as compared with 135.6 percent of the latter. The increase in value may,

Table 2

Increase in value of per head food consumption deriving from changes in prices, and its distribution

Group of products	Value of per head food consumption (Ft)				Increase in value deriving from price increases	
	at current prices		at 1976 prices			
	1976	1980	1976	1980	Ft	percentage distribution
Meat, milk, egg total	3881	5 522	4203	4491	1353	46.53
Fats total	644	813	655	697	127	4.37
Cereals, potato, legumes, oil-seeds	1303	1 673	1303	1259	414	14.24
Sweets	732	1 033	732	772	261	8.97
Vegetables and fruit	1668	2 136	1668	1631	505	17.36
Spices and other	309	336	309	289	47	1.62
Price margin of foodstuffs in restaurants	316	490	340	313	201	6.92
Foodstuffs total	8853	12 003	9210	9452	2908	100.00

Source: [2] pp. 44–50.

Remark: Since in the publications of the Central Statistical Office consumption data were not converted, for the sake of comparison, into 1975 prices (such statistics are given only at 1976 prices), we also were obliged to change the base year in our computations (1976 was taken instead of 1975). But this does not change the validity of statements concerning the tendencies and proportions of prices.

therefore, be attributed in most part to the rise in prices. In the increase of value arising from price changes the largest weight is that of the group of products containing animal proteins (meat, milk, eggs). To these fell almost half of the difference in value arising from the total price increase. The Table shows at the same time that in spite of rising costs the consumption of meat and of products containing animal proteins did not decrease but rather increased in volume. The data processed in greater detail made it clear that within this group of products the greatest weight in the increase in value arising from higher prices (three-quarters) fell to meat and meat products, and this was mainly owing to the price increase of carcase meat. Within fats it was lard and poultry fat, within carbonhydrates it was sugar that contributed most to the fictitious (only nominal) increase in the value of consumption.

It may be appreciated as a favourable phenomenon that the growing share of products containing animal proteins is to a considerable extent also in real terms. On the other hand, it should be qualified as an unfavourable tendency that the share of fats grew in real terms as well, while their ratio decreased in nominal terms. It is a further unfavourable change that the share of vegetables and fruits and of the restaurant price margin decreased in real terms. (See *Table 3.*)

Table 3
Changes in per head food consumption
(percent)

Group of products	At current prices		Change in percentage points	At 1976 prices		Change in percentage points
	1976	1980		1976	1980	
Meat, milk, egg	43.8	46.0	+2.2	45.6	47.5	+1.9
Fats	7.3	6.8	–0.5	7.1	7.4	+0.3
Cereals, potato, legumes, oil-seeds	14.7	13.9	–0.8	14.2	13.3	–0.9
Sweets	8.3	8.6	+0.3	7.9	8.2	+0.3
Vegetables and fruits	18.8	17.8	–1.0	18.1	17.2	–0.9
Spices and other	3.5	2.8	–0.7	3.4	3.1	–0.3
Price margin of food-stuffs in restaurant	3.6	4.1	+0.5	3.7	3.3	–0.4
Foodstuffs total	100.0	100.0		100.0	100.0	

Qualitative "composition-indices"

Since total food consumption and the quantitative shares of the main groups of products hardly changed in the period under examination, and the increase in value of total food consumption was very unevenly distributed among the groups, it may be assumed that the effect of prices was reflected rather in structural changes within the groups. These processes are demonstrated by the so-called qualitative indices of *Table 4.*

We obtained the qualitative composition indices by dividing the value index by the quantity index and expressing the result, too, in the form of an index. If the value index is higher than the quantity index, this means that consumption in the given group of products has shifted towards products of higher value and if the relationship between the two indices is the reverse, the composition of consumption has changed in favour of cheaper products, probably also of a poorer quality.

As it can be seen from the data, only two of the nine groups of products (milk and eggs) have a qualitative index of a positive sign. Since, however, milk is a homogenous article, the changes in question are probably not due to an improvement in composition, but must be qualitative changes due to packing (more was consumed of the so-called school milk). And in the case of eggs, it was the conversion of the number of eggs into kilogrammes that may have caused the considerable difference.

Apart from the two above-mentioned groups of products, qualitative indices with a negative sign were obtained with all groups of products, showing that the average quality composition of the foodstuffs covered by the examination became poorer. The same tendency is indicated by the changes in the average value of one kilogramme of food consumed. (See *Table 5.*)

Thus the per unit value of the foodstuffs consumed fell between 1975 and 1980, because within the given group of products more was consumed of the cheaper items (computed at unchanged prices) than before. This phenomenon is usually evaluated as a qualitative deterioration in structure, though it is not certain that such evaluation is in every case justified. The reason is that the consumer may adjust himself to the new prices and relative prices in a way that he tries to buy those of the relatively cheaper articles whose nutritive value is not, or not much, less than that of the earlier purchased articles. Thus he may sacrifice something of the good flavour and yet he will not eat much worse with the substituting articles, what is more, by the substitution the structure of nourishment may even improve.

Development of consumption from the point of view of the nutritive value

We have examined, in which way the standards of nourishment developed during the second half of the 1970s.

According to the data of *Table 6,* not only the average *nutriment consumption* did not deteriorate during the period under examination, but it positively *improved.* Except

Table 4

Qualitative "composition indices" of food consumption in 1980[a)]

(1975=100)

Group of products	Value of per head consumption at 1976 prices (Ft)		Index 1980/1975 (a)	Volume of per head consumption (kg)		Index 1980/1975 (b)	Qualitative index a/b	Yearly change of qualitative index (percent)
	1975	1980		1975	1980			
Meat total	2149	2085	97.02	68.5	71.7	104.67	92.69	–1.51
Fish	59	41	69.49	2.7	2.1	77.78	89.34	–2.30
Milk	424	564	133.02	126.6	166.1	131.21	101.38	+0.28
Eggs	367	592	161.31	15.2	17.7	116.45	138.52	+6.80
Fats total	682	697	102.20	29.1	30.5	104.81	97.51	–0.50
Flour and rice	222	168	75.68	122.2	115.1	94.19	80.35	–4.27
Potato	348	305	87.64	66.8	61.2	91.02	95.66	–0.90
Sugar	442	390	88.24	39.4	37.9	96.19	91.74	–1.71
Vegetables and fruits	1443	1308	90.64	159.2	154.5	97.05	93.40	–1.35
Total of the listed food-stuffs	6136	6150	100.25	629.7	656.8	104.30	96.30	–0.80

a) The Table only represents about 65 percent of food consumption, since no quantitative statistics are available on the total list of products.

Table 5

Average value of one kilogramme of per head food consumption
(forint, at 1976 prices)

Group of products	Average value per one kg		Index 1980 / 1975	Yearly rate of growth or reduction
	1975	1980		
Products containing animal proteins[a)]	14.08	12.74	90.48	–1.98
Fats[b)]	23.44	22.85	97.48	–1.50
Products containing carbonhydrates[c)]	4.11	3.65	88.81	–2.30
Vegetables and fruits	9.06	8.47	93.49	–1.33
Total of the groups of products listed[d)]	9.77	9.39	96.11	–0.80

Source: Author's computations based on the data of [2].

a) Meat, fish, milk, egg
b) Butter included
c) Flour, rice, other milling products, sugar
d) As in *Table 4*

for the consumption of fats (which, unfortunately, further increased, thus even more deviating from the norm), the average consumption of all other nutriments came nearer to the norms corresponding to a healthy nourishment. And this in a way that somewhat less carbonhydrates and more proteins were consumed, and, as a result, there was less exaggerated calory consumption. Within proteins, consumption of those animal origin was growing to the greatest extent, and thus almost reached the healthy norm. This development was due to higher consumption of poultry meat, dairy-products and eggs, which allowed the consumer to get this valuable nutriment at relatively lower prices.

From the aspect of healthy nourishment it is, however, a problem not to be underestimated that during the same period the share of vegetables and fruits—most important carriers of vitamins and minerals—was stagnating within the comsumption of total calories, and decreasing within the total protein content. This phenomenon shows that, with the given supply, consumers could not find such items at reasonable prices with

Table 6
Daily per head nutriment consumption

Denomination	Actual consumption			Norm of healthy nourishment[a]	Actual consumption in percentage of the norm	
	1975	1980	Index (1980/1975)		1975	1980
Calories	3 242	3 220	99.3	2 850	113.8	113.0
Kilojoule	13 574	13 481	99.3	11 913	113.8	113.0
Carbonhydrates (g)	425.1	409.1	96.2	380	111.9	107.7
Fats (g)	127.7	130.8	102.4	100	127.7	130.8
Protein (g)	100.7	103.9	103.2	113	89.1	91.9
of which:						
animal	48.9	55.3	113.1	57	85.8	97.0

Source: [2] pp. 86–88

[a] In the Research Institute of Internal Trade a so-called ideal model of nutrition was drawn up using the norms of nutriments indicated by the National Institute of Trophology, the demographic data of the period under examination, as well as the distribution of the population according to physical exertion. The results are summed up in the study [4].

which they could have substituted the items that grew more expensive in full nutritive value.

In the course of our examination we converted the income groups of the five social groups recorded in household statistics [5] by weighted averaging into three income categories (low, medium and high), and examined, among other things, the development of their nourishment standards in the years 1976 to 1980. On the basis of this examination we established that certain problems that had existed before continued to worsen in the period in question.

In the low income households the per head average calory consumption was not enough for healthy nourishment at the beginning of the period under examination, and this situation was even worse in 1980.* (See *Figure 1.*) It is especially blue-collar worker households in which the calory consumption presents a problem, since manual labour requires an above-the-average energy consumption. The same can be said of the households with a double source of income,** and of peasant households, though with these the lag behind the norm is of a lesser extent.

*It has to be noted, however, that the low-income households are mostly the families with more children than the average, so the norm of calories is lower than the average, if the children are under twelve years.

**Income from both industrial and peasant work – (Ed. note).

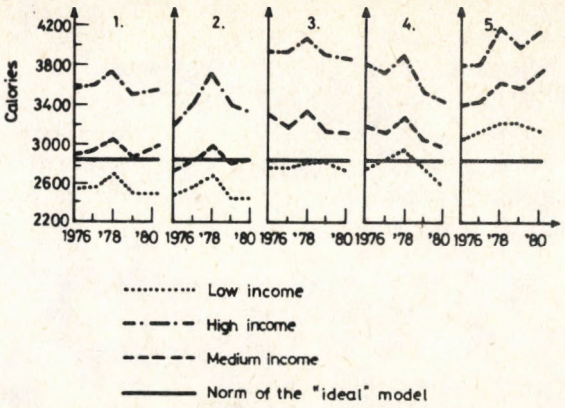

Fig. 1.

Per head daily calory consumption according to social groups and income brackets.
1. Manual workers, 2. Intellectuals, 3. Cooperative peasants,
4. Households with double source of income, 5. Inactives
(1 kilojoule = 4.1866 calories)

On the other hand, those of the inactive households with medium and high income consume too many calories, and they further increased this consumption during the period in question, while the energy consumption of all other groups was decreasing.

In the consumption of carbonhydrates the same problems were found as with calory: consumption of the low income group, already below the norm, further diminished between 1976 and 1980, except for the inactive households, in which the tendency was the reverse. (See *Fig. 2.*)

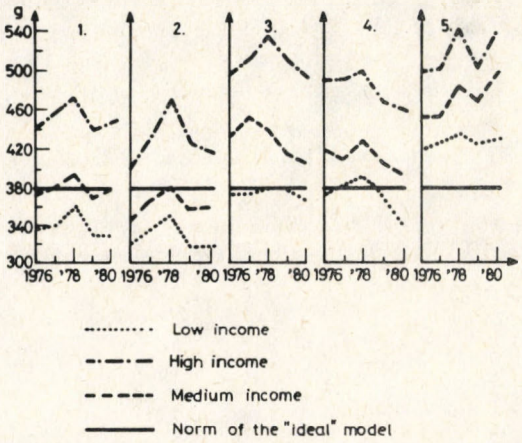

Fig. 2.

Daily per head carbonhydrate consumption according to social groups and income brackets.
(for explanation of numbers see Fig. 1)

The consumption of fats is in general too high relative to the norm (except for the low income group), and this situation has not changed much during the period under examination. This is due, probably, not only to bad eating habits, but also to fats being the cheapest source of calories. Besides, the average rise in the price of fats was much lower than the average price increase of foodstuffs. The question arises, whether it was correct to apply such price policy in the case of items whose comsumption is exaggerated and thus detrimental to health. (See *Fig. 3.*)

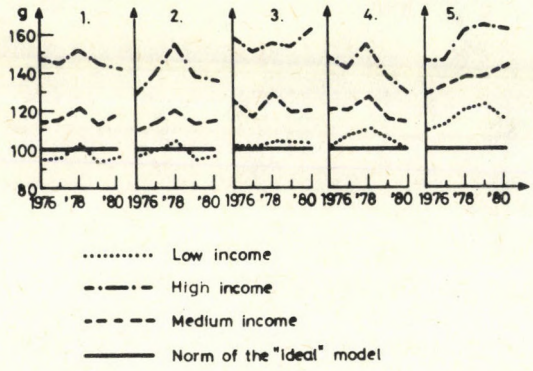

Fig. 3.
Daily per head fat consumption according to social groups and income brackets
(for explanation of numbers see Fig. 1)

From the households of the cooperative peasantry and those with a double source of income the medium and high income groups usually consume more of the nutriments than other social groups of the same income level. This may be explained by the character of the work and the way of life, as well as the possibility of consumption from the

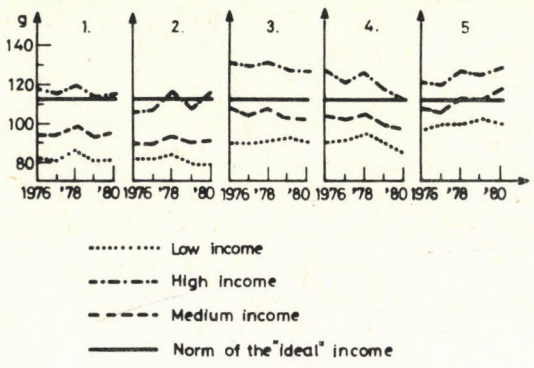

Fig. 4.
Daily per head animal protein consumption according to social groups and income brackets
(for explanation of numbers see Fig. 1)

household's own production, in which case the effect of price increase is not felt. The differences are generally considerable in the consumption of proteins as well. (See *Fig. 4.*)

It is characteristic of the period that the position of the low income group in respect of protein consumption did not change much, or, with a few groups, it even worsened. It is, however, interesting to note that within the total protein consumption that of animal proteins did not change on the whole with the low income group and even increased a little, while it decreased, to a minimum extent, only in the worker households. (See *Fig. 5.*)

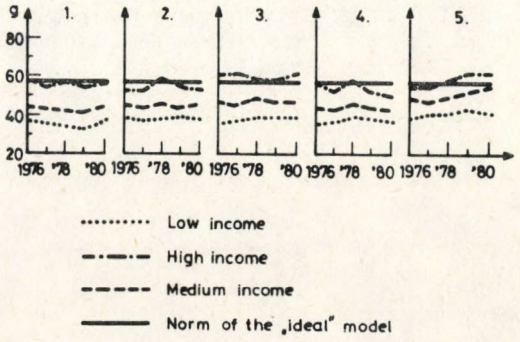

Fig. 5.
Daily per head protein consumption according to social groups and income brackets (for explanation of numbers see Fig. 1)

Summing up, it may be stated that the official price increases of the late 1970s, and the changes in the uncontrolled free trade prices affected the structure of food consumption in a way that it shifted towards relatively cheaper products which are, in general, also of poorer quality.

The changes in food prices also had favourable effects mainly in the medium and high income groups. This appeared in that these groups reduced to some extent their consumption of products in which they had surpassed the norms of healthy nourishment and thus they improved the composition of their consumption. On the other hand, the price increases also had undesirable consequences, mainly in the low income groups, in which the already existing lag behind the norms of healthy nourishment was preserved and with a few groups even grew. Special attention must be paid to this latter phenomenon because, if this tendency continues for a long time, it may give rise not only to economic policy problems, but to social ones as well. Therefore, it is important to make and put into effect the correct income, price, and supply policy decisions in time, so that the generally achieved development of food consumption should be felt by every social class, since what is involved is the satisfaction of basic needs.

References

1. Muszély, Gy.: Fogyasztási idősorok elemzése ökonometriai módszerrel (Analysis of consumption time series by means of econometric method). Belkereskedelmi Kutató Intézet, Budapest, March 1982. (Manuscript).
2. A lakosság jövedelme és fogyasztása 1960–1980 (Income and consumption of households 1960–1980). Központi Statisztikai Hivatal, Budapest 1981.
3. Kiskereskedelmi áralakulás az 1971–1980. években (Development of retail trade prices in the years 1971 to 1980). Központi Statisztikai Hivatal, Budapest 1981.
4. Berényi, J.–Holé, M.–Versztovsek, R.: Élelmiszerfogyasztásunk értékelése az egészséges táplálkozás szempontjából (Evaluation of Hungarian food consumption from the aspect of healthy nourishment). Belkereskedelmi Kutató Intézet, Budapest 1982.
5. A *Háztartásstatisztika* 1976–1980 közötti évfolyamai (Household-budget statistics, Vols 1976–1980). Központi Statisztikai Hivatal, Budapest.

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BOOK REVIEWS

NYILAS, A.: *Magyar válasz a világgazdasági kihívásra* (Hungarian answer to the world economic challenge). Közgazdasági és Jogi Könyvkiadó, Budapest 1982. 303 p.

In the introduction to his book, András *Nyilas* specifies his purpose in that "on the one hand, he tries to simplify and make easily understandable the complex, intricate and multifactor economic processes, on the other hand... he wishes to provide a scientific analysis of the real economic processes and their consequences" (p. 1).

The first half of this dual purpose has almost completely been fulfilled by the author. He provides rich information, amply supported by statistical and literary sources, on the economic processes. He defines concepts exactly, sticking to essentials, and uses them accordingly. His purposeful handling of statistics, his partly innovative and experimental use of the statistical methodology, and his highly informative description of all this, pointing out also the shortcomings of the methods are remarkable.

The other, no less important, part of the author's purpose: to provide a scientific analysis, has also been fulfilled with more or less success; care was taken to historical approach, that is, to examine the dynamics of the processes, or, the preliminaries of the situation developed by the early 1980s. It is true, though, that the division into short periods breaks the train of thought at certain points. The analysis covers the development of the Hungarian economy during the last ten years. The basis for the evaluation of the phenomena–the achievements and deficiencies of the Hungarian economy–is provided by a well-arranged and many-sided presentation of parameters, facts, and data. The other criterion of qualification is to confront the economic policy objectives laid down in central decisions with reality, that is, with the situation as it is. Finally, a few elements of the changes that have taken place in world economy, and a few international comparisons serve as background.

It adds to the value and freshness of the book that the author clearly states his opinion on the economic policy practice–and especially on some of its elements–in the last ten years of the Hungarian economy, not lacking in tensions and turns. This explicitness is rather appealing, though it would have done no harm to make it clear at several points that the questions treated are most debated issues, about which various views and approaches are known and have been published.

The volume begins with an introduction and ends with Chapter VII under the title "An outlook on the 1980s". Both are summary pictures–according to the author's evaluation–of the ensemble and interaction of the processes taking place in world economy and in Hungary that have led to the present tensions in the Hungarian national economy. It is not easy to bring up a detailed and convincing answer of a strictly "straight line", or a set of arguments, to this question which is at the centre of debates.

The introduction and some of the statements of a few other chapters suggest that, from the viewpoint of chances of economic development, the author attributes special importance to the degree of supply with energy and raw materials, because the terms of trade depend on it–or at least have largely depended on it during the last ten years. Accordingly, he classifies the countries of the world as successful or less successful according to whether they abound in or are short of natural resources. At first, this conception of

dependence on raw material imports and terms of trade seems to be somewhat over-emphasized and deterministic. Later on, however, it turns out that the author is not one-sided, since he makes it clear: "The price losses from sales suffered because of the deteriorating terms of trade can and must be compensated by improving the efficiency of production, and by increasing profitable exports" (p. 16).

Before examining Hungary's present relationships with the world economy, the book inspects the Hungarian foreign economic policy pursued before World War II and in the decades following it. The Horthy-era was characterized by isolation from world economy, excluding world economic effects as much as possible. Of course, this was partly due to Hungary's position following World War I, and in the 1930s, to the effects and pressure of the Great Depression of world economy. During the twenty-five years following World War II, the foreign trade relations of Hungary were growing dynamically, with a market orientation quite different from that of earlier times. Hungarian industrialization, in the 1950s and 1960s was promoted by the growth of international trade, and by the fact that raw material and energy imports were cheap on the world market as well as on the socialist market, while the products of industry could be well placed on the same markets. From the early 1950s to the early 1970s Hungary's terms of trade were developing quite favourably, even though with fluctuations, on both main markets.

Chapter II is a vivid description of the price explosion on the world market in 1973–1974, its dimensions, components, and circumstances. The non-specialist reader receives exact information on the structure of the most important world market price indices, on the changes in price indices and in the terms of trade of the different countries, on the redistribution of incomes on a world scale and, finally, on the classic theory of comparative advantages. The author points out that the sudden and large-scale rearrangement of relative prices and terms of trade can, to a certain extent, be interpreted in a way that it "adjusted" the costs and income disproportions that developed on the basis of earlier market and power relations in the course of the international division of labour. Namely, for long years before the price explosion, the industrial countries were financing their economic development partly from the difference between the low energy and raw material prices and the relatively high prices of finished products. The oil resources of the developing world were exploited earlier in a great part by international monopolies. The developing countries–among them oil producers–today claim and assert their right to make use of their national resources. However, the historical and economic causes of the price explosion only justify the necessity of a drastic change in relative prices, but not its dimensions. It became quite clear particularly after the second sudden rise in oil prices (1979–1980) that the power relations –cohesive and disruptive forces–between consumers and producers, states and interest groups basically influence and delimit the manoeuvreing freedom of producers.

The two sudden rises in oil prices were, as a matter of course, followed by natural reactions of the largest importers: the advanced industrial countries. The fast increases in costs, proliferating inflation, and the tense state of the current balances of payments prompted the firms and the states to adjust themselves, to protect their positions and, wherever possible, to strengthen them. The author points out that ". . . in the adjustment process spontaneous factors are determinant" (p. 86), that is the firms made efforts at developing a business policy in conformity with the new circumstances, while the business sector also had to suffer grave losses. And the economic policy of the Western countries was intended to achieve–though with different instruments and results in each country–that the actions of firms should serve the processes considered to be favourable from the macroeconomic aspect, and the unfavourable elements should be suppressed.

Of course, a "successful" adjustment to the new world economic situation also demands sacrifices. In our age, such are the unprecedented unemployment, the long-lasting inflation (in our days already abating a little), the long stagnation of investment activities.

Reffering to other Hungarian authors, including Béla *Kádár,* András Nyilas states that "the adjustment policy of the small West-European countries was determined by the fact that their terms of trade badly deteriorated–almost like

those of Hungary. Notwithstanding, none of these small countries developed any comprehensive development strategy directed at reducing the openness of the economy, giving priority to considerations of safety, pointing towards protectionism. In that period (1974 to 1980) the economic policy of these small countries was characterized by increased foreign trade activities, mainly expansion, and changes in the product pattern of exports. Within the dynamically growing exports the ratio of machines, equipments, and chemical products was growing, while that of products of the lagging industries (textiles, clothing, metallurgical products) was decreasing. The government, the budget and banking organizations of the small countries supported this tendency.

It is remarkable how the West European small countries turned increasingly towards the third world, partly as independent partners, and partly by enlarging their inter-enterprise relations with the big countries (pp. 89–90).

Although the reaction of the small West-European countries, and that of the lately industrializing developing countries show a great variety, ". . . so much . . . can be stated already that from the aspect of the external equilibrium an outward oriented economic policy seems to be more advantageous than inward orientation" (p. 91).

After presentation of the direct effects of the oil price explosions, and having highlighted the adjustment processes of the countries affected, the author refreshes the reader by expressing his opinion on the methods used to quantify the effects of changes in the terms of trade. His reasoning helps to orientate the reader; his definitions make it clear which questions are answered by the various possible methods and which are not.

The part of the book discussing the Hungarian economic situation after the first oil price explosion and its judgement at the time is very instructive (pp. 114–137). It shows, for example, that in 1975 home consumption grew by exactly 20 percent in comparison with the previous year, as opposed to the 2.5 percent growth of the actually available real resources. In 1974–1975 not only the total price loss, but also the "over-consumption" on the home market exceeding the growth of the volume of national income had to be covered with an import surplus. The deterioration of the Hungarian foreign trade equilibrium was caused, however, not only by the unfavourable development of world market prices (terms of trade) and over-consumption on the home market. The picture has a third aspect: ". . . and this is the given structure, technical and productivity standards, and quality of the Hungarian production, in one word: insufficient competitiveness. The new conditions on the world market unveiled the weak spots of the Hungarian economy which had remained hidden during the almost twenty-five years of world economic boom" (p. 126).

"In 1974–1975 the burden of the deteriorating terms of trade was carried in most part by the budget, since it took upon itself the additional costs of the rising import prices, while the profit gained from the rising export prices was realized by the enterprises" (p. 133). And yet: "The main trouble was not that the profit of enterprises was growing, while the revenues of the budget were stagnating, but that such activities as were in fact loss-making for the national economy appeared with the enterprises as profitable production and exports. For the loss-making production and exports the enterprises paid out increasing wages and realized high profits" (p. 135). The book qualifies the economic processes of 1974–1975, the economic policy attitude taken in reaction to the changes of foreign markets, and the related measures of income regulation with good reason as having determinant impact on the economic-financial situation of the country even today.

An especially interesting chapter of the book is the one treating the 5th Five-Year Plan (1976–1980) and its first three years (pp. 138–216). It reveals the direct preliminaries and factors that led to the upsetting of the national economic equilibrium and to the stagnation of the Hungarian economic development, accompanied by tensions. It analyzes the targets of the 5th Five-year Plan and the expectations attached thereto, the decisions that proved to be wrong, the lack of harmony between objective and means. A 30–32 percent economic growth, a 18–20 percent rise of real incomes, and restoration of foreign trade equilibrium *all at the same time* proved to be an exaggerated task under the given conditions of world economy and of the

Hungarian economy. They had been based on the assumption that it would be possible to essentially improve efficiency, to raise the technological standards of production through mobilization of enterprise reserves, and to achieve that exports increase much faster than imports in both markets, especially in the non-rouble market. The national economic plan expected that foreign trade would become practically balanced by the end of the plan period.

However, the 1976 price adjustment introduced only a fraction of the world market price changes into the producer price system and practically maintained the principle of "input-proportional" (cost plus) prices. The input-proportional prices have not the only disadvantage of failing to orientate the producer in respect of profitability, but, further, they also recognize all costs incurred because of careless and wasteful management, that is, they do not make it necessary to reduce production costs. It is possible to make all things recognized in the price, or, if it is not, it is still possible to ask for state subsidy. "Therefore, the 1976 price adjustment necessarily entailed a growing extent of individual subsidies and central interventions" (pp. 145–146).

Quoting László *Antal,* and in agreement with him, the author is of the opinion that the 1976 adjustment of the regulatory system in Hungary was clearly a backward step on several essential points, not only in comparison with the conception formed on the basis of the critical analysis of the earlier regulatory system, but in comparison with the economic control and management practised during the 4th Five-Year-Plan period as well. He makes the statement: "If improvement of the efficiency of centralization and of central control is interpreted in a way that the central organs intervene at every moment with the management practice of enterprises–I hold this to be wrong. It is a method which, in the final account, leads to reducing the efficiency of central control . . ." (p. 154).

Since for 1977 an acceleration of economic growth and for 1978 again its dynamic growth had been planned, the foreign economic equilibrium of Hungary worsened dramatically by 1978. This was in a great part owing to the considerable change in the relative prices on the world market. "It is certain, all the same, that if the Hungarian economy had reacted already in 1974, or in 1975, or at least after 1976 by definitely constraining the growth of domestic consumption, such deficit could not have accumulated. . . the foreign trade deficit would not have been of such dimensions, either, if we had been able to increase exports through improvement of economic efficiency to such extent as to reduce the price loss, for example, as it happened in the rouble trade.

As opposed to all this, the growth of domestic consumption did not slow down, nor did the growth of Hungarian exports exceed that of imports–as a matter of fact, it did not even reach it–therefore, the total price loss from sales accumulated during five years was financed from external resources." (p. 174).

In analyzing overconsumption on the domestic market, András Nyilas examines the development and circumstances of living standards, as well as those of investment and accumulation of inventories. Enterprises are not to be blamed for the overfulfilment of the investment plans of the "enterprise" investment category. As a matter of fact, hardly a tenth of enterprise investments were so-called autonomous investments during the period under examination (on which enterprises make independent decisions). The huge stocks and the large rate of accumulation of stocks are such a sign of a disease of the Hungarian economy, for which no effective medicine has been found as yet.

In commenting on the decisions of the Central Committee of the Hungarian Socialist Workers' Party made on the 20th October 1977, the author refers to the main tendencies of the Hungarian long-term economic policy, reviews the priorities and the changes in the development conceptions. He asks the question: by what criteria can economic efficiency be judged, and which are the methods to improve it? The competitive sector, adjustment to world market prices, import competition, export orientation, the way of really asserting the central will, development of the product pattern within enterprise authority–these are by and large the questions the interpretation of which provides

the author with the opportunity to take a stand in respect of a system of instruments suitable for development of the economy.

After setting forth the main principles of the Central Committee decision of December 1978, the author goes on to describe the most important features of the new producer price system introduced at the beginning of 1980. It seems that the author is for the "competitive price system"; in his opinion, the simulation of competition may also be advantageous in a socialist planned economy, and ". . . it may be able to show, which enterprises must be rehabilitated, or wound up, and which are those, the activities, production line, and management of which must be radically changed, more exactly, ought to be changed" (p. 233). He thinks that ". . . it is not primarily the rate of exchange that presses for economy with imported materials and energy", and that ". . . practically the only source of a moderate growth is the increase of exports to the dollar area" (p. 231). At this point it would have been correct, perhaps, to refer to the contrary opinion of a number of other authors and to the fact that the constraint put on production and investments does not necessarily lead, under the Hungarian conditions, to the rise of non-rouble exports, as it has not done so far.

After the 1979–1980 correction of the growth path the balance of trade has considerably improved. András Nyilas also speaks about the sacrifices made for improvement of the foreign economic equilibrium. A strong reduction of investment carries the risk that in certain sectors not even the conditions of simple reproduction can be guaranteed. The difficulties accumulating in the way of raising, or even of maintaining, the living standards present not only a problem of interests, but also a socio-political one.

As for future perspectives, the authors's relative optimism is not fully in harmony with the sombrely realistic representation of the economic processes analyzed in his book. He says: "The targets of the 6th Five-Year Plan and the 'open' character of the plan, together with the 1980 adjustment of the price and regulatory systems, have created the possibility for the Hungarian economy to provide an 'adequate answer' to the world economic challenge" (p. 281). The train of thought and central message of the book are more in harmony with the following statement: ". . . in the long run, the central protection of low productivity, unprofitable production, and of technological-qualitative lag is not an acceptable economic policy in any country" (pp. 286–287). The thought closing the epilogue of the book is also along this line: "In order to make a step forward, an offensive further development of the Hungarian economic mechanism seems to be necessary, which–based on the improvement of economic efficiency–stimulates for a more dynamical development than that of today" (p. 296).

A. RÁBA

TÁRNOK, É.: *Vállalat állandó bizonyítási kényszerben* (Enterprise under the constant pressure of demonstration). Közgazdasági és Jogi Könyvkiadó, Budapest 1983. 190 p.

Those Hungarian economists who in the late 1960s and early 1970s set out the value-free description and the analysis of the events taking place in the economy and in the life of enterprises applied in their work the approach and methods of the neoclassic theory of the firm and/or sociology of organizations. (They collected and analyzed the goals and behaviour of individuals and groups, and the means of bargaining they used to achieve their goals.) The application of the approach, the sociology of organizations and the theory of the firm proved to be a good choice in many cases, for example, in the presentation of the different goals and tactics of enterprise management and employees, or in the description of the relationship between central organs and enterprise management. However, just because such descriptive studies were growing in number, it turned out that there existed important differences in the interests and behaviour of those having the same position in the division of labour and in the organization. In other words, this meant that the investigation of the system of management and incentives, or of work organization was hardly sufficient to reveal these differences.

Realizing these difficulties and limits of analy-

sis and description, some researchers, among them Éva *Tárnok,* try to use the approach and methods of other related disciplines, for example, of history instead of those of sociology and theory of the firm. Analyzing and interpreting the about 80-year history of one of the product lines of the Láng Gépgyár (Engineering Works): the big power station turbo-generators, Éva Tárnok boldly applies the methods of factory and technical history. Yet it would be a false simplification to consider her book a historical description. The reader does not hold in hand a standard history of a product, though Tárnok strictly sticks to the chronological order of the events. Meanwhile, similarly to the widely used methods of historians, she attributes importance to certain events, while neglecting others. For Éva Tárnok, the important events are not the changes in control, organization, or ownership, nor does she dwell long on the influence of great managers, either. (In this sense she differs from those who expect a further improvement in the standards of empirical economic research from borrowing the methods of social psychology (or, psychopathology?).) As it is stated in the introduction of her book, she discusses consciously technical-technological details extensively. Her opinion is–and with this she continues and further develops certain marketing theories, the school of industrial organization, and various theorems of mathematical economics–that "It is more or less inevitable to describe such details. . . in order to present the given market structures and the types of (enterprise, M. L.) behaviour basically determined by them" (p. 12). She adds that "A description written with this approach deals with those micro-proportions of the economy, calls attention to such micro-proportions which on the central economic management level can only be recognized in principle. Specifically and individually they are inextricable" (pp. 12–13). She is not speaking simply about what the standard textbooks of marketing write about the differences of the market segments of each product. Though the fact, that the buyers of the turbogenerators are state-owned, or partially state-owned economic actors has in itself a considerable influence on the market prospects and forms of behaviour of the turbo-generator manufacturers. However, on the basis of an international comparison, Tárnok points out, that the use value and manufacturing technology of the product–in our case of the big turbo-generator–determines the successful paths of enterprise development and she investigates in her book, what the reason can be for the fact that "Hungarian manufacturing industry could not follow any path of normal development" (p. 12). The Láng Gépgyár (Engineering Works) in which turbo-generators have been manufactured for about 80 years are among the "follower" enterprises: its development activities, the construction of turbo-generators of increasing size and performance have been based on licences. "Licences are necessary for the smaller firms of this branch. This stems from the specific character of the turbo-generator as an individual product. The most striking characteristic of individual production in comparison with mass production is that no prototype is made which would help to reveal the errors of construction. Each machine produced will be put into operation." (p. 19) From the other side, this means that "changes in construction and development take place slowly and gradually. The successful steps become part of the accumulated construction knowledge" (p. 19).

These are facts because, during the years of the Cold War, and even during the 1960s, though licence relations were lost and the earlier research and experimental backgrounds were lacking, the turbo-generator production of the Láng Gépgyár (Engineering Works) seemed to be prosperous. As a result of their accumulated construction knowledge, they increased the unit output from 32 to 50 MW without any outside help. However, as the authoress points it out: "This development potential was still inherent in the construction of the 32 MW unit of the 1930s of the BBC" (the licence-supplier international firm. M. L.) (p. 33). Here we can find first the advantage of Tárnok's method: the methods of economic analysis are not enough to demonstrate the lag behind the leading international performance. The orders of the enterprise covered the capacities, and for a long time nothing questioned the grounds of the production of turbo-generators. The constructors –possessors of the accumulated knowledge– designed even the 100 MW unit, "which was the top performance of the post-war construction

activities of the firm" (p. 36). But, and at this point starts the calvary of the production of turbo-generators: "With the increased demand of the Hungarian (energy supply, M. L.) system there was no time to wait for the experiences with the 100 MW units. In the meantime further large units were demanded. Thus, almost simultaneously with ordering the 100 MW unit, three 150 MW units were ordered from the Soviet Union" (p. 37).

Tárnok points out, too, that "by the early 1960s not only the reserves of independent construction and development had been exhausted at the Láng Gépgyár (Engineering Works), but an up-to-date turbo-generator production was also constrained by the technological potentials of the factory" (p. 40). Realizing this situation, the factory signed a licence agreement (it was possible in the years of détente) with the BBC, the greatest turbo-generator producer, and purchased several machines necessary for the higher unit performance, and built a large workshop.

"The development at this point attained its goal: the efforts and achievements of the factory made it possible to preserve,. . . till the possible date of the licence purchase, this production line, and at a level that enabled the factory to successfully adopt the licences of BBC, one of the leading manufacturers of the world, in merely two years" (pp. 38–39).

Let us notice again the advantages of the method chosen by the authoress: an analysis of the economic results and the power relations within the enterprise could not have explained, why the technical reserves of the product and of the technology helped to resolve, for such a long time, the doubts raised against the technical standards of the enterprise.

However, the licence agreement signed in 1967 is not yet the "happy end" in the history of Hungarian steam-driven-turbo-generator production. The reason is that the price quoted for the 200 MW turbo-generators manufactured under the licence would have been about the double of that of the Soviet turbo-generators of a similar performance available through imports. The controversy concerning prices that followed and the potential loss of orders "threatened the (Hungarian) producers of energetic equipment in their existence" (p. 51). If we apply the theorems of economic theory, we should be pleased by the effect of the low import price on home performances. The authoress, however, comparing the technical parameters of the two competing products, as well as the chances of service and of a quick adjustment of performance, demonstrates by a thorough analysis that the higher price quoted by the Láng Gépgyár (Engineering Works) could be justified in a great part by real additional performance. She also makes it clear, that the low prices quoted by the Soviet party were the consequences of a special and even unique constellation of the rates of exchange: "The Hungarian commercial rates of exchange deviating from the officially declared rates of exchange of the freely convertible currencies and that of the rouble cause that the Hungarian industry can only compete with the export quotations of the CMEA countries as an exception. And if the production of any so low-priced item is reduced and supply is stable, the consequences can be identified with the destructive effect of dumping on the domestic production pattern." (p. 99)

The authoress calls attention to the fact that "the price level in the CMEA is subject to bargaining from the importer's position as a rule,. . . only if prices are high. Imports at low prices are considered a good deal, and the justifiable protection of the domestic producer of the goods competing with imports is left out of consideration. Although this may be necessary even if the competing products are of approximately the same technical value. On the user's side the low import price is in fact a saving, therefore, in those cases in which the competitive prices are temporary or are not based on economic considerations central intervention is needed." (p. 101)

What were the considerations and actions of the state in the case of the turbo-generator when, in Tárnok's opinion, "the import competition was unsuited to measure the profitability of domestic production. . . it failed to represent the producers of these branches of industry, instead, it mediated the proportions of a special price system, changeable by administrative means, to the domestic market." (p. 103)

Since the investments into power stations have remained even after 1968 in the direct scope

of authority of the central bodies of economic control, Tárnok widely discusses in her book the national economic considerations concerning turbo-generator production. She reveals that the central bodies of economic control supported the import competition of the product in question –which is protected in most of the Western countries, too–because "the imports of the Soviet turbo-generators affected "positively" two balances of foreign trade: not only that of the Hungarian and Soviet machines trade, but the Western balance of payments as well, since the Soviet imports substitute for the Western import materials needed for the domestic production of generators." (p. 67) But the authoress goes further and produces documents to show that the authorities and the public utilities, which are pseudo-authorities and which are involved in the production of turbo-generators showed–and still do–a particular fluctuation in their opinions. If, not only the balance of trade, but also the safety of electric supply of energy of the country is taken into consideration, then it is not in their interest to eliminate or reduce the domestic production of generators. Thus, not surprisingly, in the mid-1970s the Láng Gépgyár (Engineering Works) got a loan for modernizing turbo-generator production: "Beside increasing Western exports the credit contract included another objective of about the same importance. This was to provide service for the turbo-generators running in the Hungarian power stations." (p. 141)

Using exclusively an economists' approach, this decision might also be appreciated as a logical consequence of the import considerations as outlined above. In other words, it has a lot of advantages if Soviet turbo-generators are serviced in Hungary. Tárnok, however, reveals that "in this case we are faced with a postponed decision of different ministries" (p. 153). As a matter of fact, "it was possible to make a decision on service without making a decision on production at the same time, because these two activities are quite inseparable. Thus, even if no direct decision was taken on production, a chance was given for the development of production". (ibid).

Again, a thorough analysis of the micro-proportions helped the authoress in finding the satisfactory explanation. And this was the same what helped her to find out, why the Láng Gépgyár (Engineering Works) could not follow the typical paths followed by the enterprises of the branch: "As if the authorities representing different standpoints had made a silent compromise on the limited development of Hungarian turbo-generator production. Those who supported its survival were content with providing the elementary conditions of production, and those advocating the elimination of production, recognizing the advantages of its survival, agreed to provide the conditions of survival to a limited extent. Therefore, after the investments, limited in themselves the branch could not strengthen so as to pass the threshold of the uncertainty of existence." (p. 176)

The book review is of a limited space, so that not all the interesting descriptions and analyses of this thin volume can be represented. We think that the review succeeded in making it clear that Éva Tárnok's method centred on the technical-technological (physical) micro-proportions and using the results also of historical science proved to be fruitful: it enabled the reader to understand interrelations which may not be revealed by other means. We hope that the authoress will use her method in further descriptions and analyses to enrich economic theory.

M. LAKI

NOVE, A.–HÖHMANN, H.–SEIDENSTECHER, G. (Eds): *The East European economies in the 1970s.* Studies in international political economy. Butterworth, London 1982. 353 p.

The decade of the 1970s witnessed a major slowing in the rapid rates of growth which had marked the world's economies in the post-War period. The economies of Eastern Europe, unfortunately, have not been immune to this general economic slowdown. While large external debts highlight the economic problems faced by many East European countries vis-à-vis the West, the origins of these problems are only partially to be found in the world economic recession, and it is necessary to examine closely the individual countries' economic structures. This collection of essays studies the East European economies during this ten year period in relation to the

economic reform of the previous decade. Written by some of the most prominent specialists on Eastern Europe, the essays contained in this work treat individually the European members of CMEA, Yugoslavia and Albania. The basic question asked by the contributors is: how have the reforms of the sixties faired in the seventies? The answers to this question vary according to the extent of the original reform and the special problems faced by national economic planners. The authors are in basic agreement that the reforms of the 1960s sufferred reverses throughout the 1970s in most of the economies. They stress, though, that this decline in "reform enthusiam" did not mean a return to the exact pre-reform situation but resulted in some major institutional changes. The "retreat" from the reforms, which were often modest to begin with, has thus been a "process of reconstruction within the system" and has led to increasing "differentiation of aims, institutions and instruments of economic policy between the individual countries." (Höhmann) It is this process of differentiation which is brought out when one examines closely the individual essays.

In the introductory chapter, Hans-Hermann *Höhmann* (Cologne) presents a general summary of the reforms of the sixties and the retreat of the seventies. He makes a distinction between two reform models: a "conservative" model, in which there is an attempt to rationalize the traditional system of central planning through branch management of enterprises, intermediate administration (associations, e.g., the WOG in Poland) and the introduction of computers and mathematical planning, on the one hand, and "socialist market reforms", in which obligatory target planning, direct allocation and centralized price setting are abolished or gradually reduced and the market mechanism provides a more rational allocation of resources, on the other. None of the reforms has remained unchanged since their implementation, and Höhmann's chapter establishes a theme which the following special studies confirm; the limited reform of the sixties did not survive intact through the seventies, but this process was varied in the respective countries. Höhmann concludes his chapter with a brief analysis of the obstacles to more extensive reform in the 1980s.

The second essay, written by Alec *Nove* (University of Glasgow), surveys the Soviet Union's economic policy and methods after 1970, a period characterized by declining rates of growth and increasing centralization of the economy. But it was also a time of increased hard currency earnings, the result of the spectacular rise in oil prices in 1973–4 and 1979 and the sale of large amounts of gold at higher prices. These earnings, in addition to the availability of Western credits, helped to finance the purchase of equipment and grain from the West. The decade ended in the July 1979 reforms which Nove sees as offering no solution to the fundamental problems of the USSR's centralized planning system. Nove clearly and precisely outlines the basic problems afflicting the Soviet economy during the past decade. He begins with a brief analysis of the 1965 reforms and continues by describing the lack of success in agriculture in the 1970s, despite heavy investment, and in meeting consumer needs, which often suffer when resources are allocated to more "important" industries that produce investment goods. A large part of the article is devoted to discussing the fundamental defects of the centralized planning system–shortages, imbalances, low productivity–which, as Nove points out, are well known to the student of the Soviet Union but useful in achieving an understanding of the fundamental problems facing the Soviet economy and other East European economies as well. Nove argues that at the heart of the matter is the inability of the highly centralized planning system to cope with the countless factors involved in running an economy. The 1979 reform, according to the author, fails to address these basic questions and hence falls far short of a serious attempt to solve the basic shortcomings of the Soviet economy. Nove stresses that a successful reform of the economy must free management from tight central control, releasing individual managers to purchase inputs and produce according to consumer requirements. Nove concludes, however, that such fundamental reform is unlikely; Soviet leaders probably will prefer to tolerate the familiar problems of the system rather than risk radical change.

Like the Soviet economy, the economy of the GDR experienced a process of recentralization throughout the 1970s. The decentralizing re-

forms first introduced in 1963, the New Economic System of Planning and Management (NES), proved to be contradictory in practice, and the levers of the reform were unsystematically applied. These reforms were almost completely abandoned following the 1969–1970 economic crisis and the process of recentralization began–this amounted to a return to many of the former administrative methods of planning and management. In the third chapter of this book, Manfred *Melzer* (German Institute of Economic Research, Berlin) presents a detailed analysis of East German planning methods, aims, instruments and problems of recentralization. These problems are in many ways similar to those of a centrally planned economy which Nove discussed in general in the preceding article. Melzer argues that within the recentralized German economy–not that it was significantly decentralized before–GDR planners possess fewer and fewer options to bring about desired changes. As in other CMEA countries, much emphasis is placed on "combines", or associations, as a means to increase production and efficiency, and some improvements are expected, according to the author. But this is only a small part of the whole problem. Melzer maintains that planners must keep in mind the population's income if performance is to be maintained at acceptable levels. However, since investment cannot be cut back without severe long term effects, domestic expenditure cuts cannot be avoided. In the past few years consumption has been restricted through concealed price increases on consumer goods. Like Nove, Melzer concludes that necessary change cannot come within the existing centralized system, and that fundamental reform is necessary if a long term solution is to be found.

The chapters on Poland, by Wlodzimierz Brus (Oxford) and on Czechoslovakia, by Jiři Kosta (Frankfurt University), are both scholarly articles and precise in their analysis of the aims, methods and political determinants of the economic policies in the respective countries. In Poland, according to *Brus*, the reforms and retreats must be viewed in respect to the workers revolt in December 1970, which in many ways determined the economic life of Poland in the following decade. The gradual reforms implemented prior to 1975 had, by that time, succumbed to the "resurgent wave of familiar centralistic devices", leaving only the organizational framework of the WOG (Large Economic Organizations). Brus maintains that to a considerable degree the reforms were undermined by the over-expansionary policy of the post-1970 leadership. This, coupled with a series of "halfturns" and a lack of internal consistency in the reforms, which meant that many of the specific elements never had a chance to work fully, led to a considerable decline in the Polish economy in the last part of the decade. As in Poland, the first half of the 1970s in Czechoslovakia was a period of economic growth marked by an expansion of private and public consumption. *Kosta* places the responsibility for this growth, *inter alia*, on the influence of positive remnants of the pre-1970 reforms which survived the recentralization process following 1968. For example, the production cooperatives in the agricultural sector were fairly free from centrally determined targets and indicators at the beginning of the reform period. Thus, in agriculture, where the reforms remained partially intact, growth rates were relatively high, while in industry, where the reforms were dismantled, growth rates suffered accordingly. But apart from agriculture, Kosta sees an unfavourable future for the Czech economy: burdened with an overly centralized planning system, labour, fuel and power shortages, and foreign trade deficits, little progress will be made without fundamental reforms. The author concludes that while "economic efficiency demands more decentralization, flexibility and openness to foreign trade", the conservative forces within the bureaucracy ensure a stalemate, and their own positions of power, through the "maintenance of centralistic. . . decision making structures and a certain isolation of the domestic economy from the outside world."

In an article on economic development and planning in Bulgaria, George R. *Feiwel* (University of Tennessee) analyzes the reforms and their effects on innovation and productivity in the economy. He evaluates the reforms in their success, or lack thereof, in shifting the Bulgarian economy from extensive to intensive growth and from quantitative to qualitative indicators for judging performance. According to the author, although some progress can be reported, in agriculture and in machinery export, overall

qualitative performance has been extremely poor. As in other East European countries, the emphasis placed on output volume, targets, lack of real incentives and poor organization have proved to be major obstacles to change. In addition, the sluggishness of the Soviet economy has meant that the close economic ties with the USSR, which Bulgaria has worked toward for many years, has resulted in detrimental repercussions on the performance of the economy. In my opinion, though, some of the more positive aspects of the Bulgarian reforms are absent from this article. Thus it is not clear from this essay that of all the East European countries under discussion who followed the "conservative" model of reform, Bulgaria's reforms were the most extensive, successful only in part, the gains made have been significant.

While in other East European economies reform measures left the traditional model intact, seeking to increase its effectiveness either by strengthening central control, or by improving the incentive system, in Hungary the reform measures substantially altered the traditional model, doing away with some central powers and increasing the independence of the lower-level economic units. In contrast to other reforms within CMEA, all sections of the Hungarian reform were introduced simultaneously, as a coherent whole; for it was felt that the introduction of individual measures might undermine the complete reform, which seems to have happened in other East European countries. Perhaps because of this comprehensive nature, the reform has remained relatively intact into the 1980s, although not without major alterations. In fact, some recentralizing tendencies did become manifest in the early and mid-1970s, and certain individual elements were severely weakened. However, the new measures that went into effect on 1 January 1980 seem to have restored many of the original reform concepts.

In presenting a "balance sheet" of the Hungarian economy in the 1970s, Thomas *Vajna* (Cologne) examines three major aspects of the Hungarian New Economic Mechanism (NEM): price policy, income policy and investment policy. The author concentrates mainly on the intentions of the reform and reserves little space for analysis of its impact on the economy. Vajna sees prices given "such an important place in the planning and steering of the economy that for many price policy constituted the core of the reform." The price system was intended to play a major role in the efficient use of resources, production and demand balances, and the output of modern products. However, as the author points out, the difficulty with the price system is that "in Hungary functioning markets are the exception rather than the rule." Vajna maintains that the lack of competition in many markets, which inhibits the development of a functioning price system, is the legacy of the natural monopoly situation remaining from the period of centralization. One of the major aspects of price policy is the linking of the domestic price level to the world market, which Vajna claims has been achieved (after long delay). The success of this linkage is more of a debatable point than the author mentions, however, and the problems resulting from this attempt are not explored in this article.

Income policy, according to Vajna, is intended to provide for constant harmony between central and decentralized interests in controlling incomes. Market impulses must be transmitted to the labour force, yet the distribution of personal incomes should remain within socially acceptable limits. He argues that it is especially difficult to introduce the principle of economic gain into an economic order where there are no real land, labour or capital markets and private ownership of the means of production is limited. In this section Vajna discusses the intended role or profit within income policy and concludes that the influence of the state in relation to circulation of income has increased greatly with indirect taxes and subsidies playing an increasing role in income redistribution. The author sees investment policy as the most stable factor of the 1968 reform. Based on a division of authority between the centre and the enterprise, investment policy places a special emphasis on indirect steering through fiscal and credit policy. Vajna stresses, though, that investment policy has been only partially effective. The serious problems resulting from overinvestment–low and uneven levels of capital utilization– "could not be solved with the set of instruments available." He concludes that both income policy and price policy, as well as

investment policy, were responsible for the inefficiency and disruptions.

The author ends his report on the Hungarian reforms with a brief examination of the new measures which came into effect in January 1980. He sees both recentralization and decentralization tendencies within the measures. On the one hand, Vajna states that a definite trend toward centralization in income policy is emerging. Income policy has become even more complex with the new reform and "over-bureaucratization of economic policy" has reached such an extent, Vajna claims, that "the intended effects are bound to fail to materialize." On the other hand, the main objective of the 1980 price reform is that the enterprise should only be able to improve its profit situation if costs per unit of production are reduced or the product range is appropriately revised, while consumer prices are to be more flexibly linked to producer prices. In closing, Vajna sees neither trend becoming dominant in the near future; neither a complete return to strict central planning nor a major reform toward a full market economy is probable in the next decade.

In addition to Hungary, the other country to implement socialist market reforms is non-CMEA member Yugoslavia. When writing on Yugoslavia it is not an easy task to strike an accurate balance between the causes and effects of the many different problems facing the Yugoslav economy. In his article on the objectives and methods of economic policies in Yugoslavia during the past decade, Fred *Singleton* (University of Bradford), does this very well, in my opinion, within the given limits of a thirty to forty page article. In an introductory section, the author discusses the historical background and evolution of the Yugoslav reforms. Unlike others writing on the Yugoslav economy, he does not, to the exclusion of all other factors, place the blame for the economy's plight on excessive wage demands by workers—although these are important—but also stresses problems generated by government policy and foreign trade relations. As well as analyzing internal problems within the spheres of agriculture, industrial self-management, banking and monetary policy, the author illuminates many of Yugoslavia's troubles stemming directly from restrictions imposed by her trading partners within the European Economic Community. As in many other East European countries, the balance of payments deficit and external debt will continue to be a major obstacle to future development.

The articles on Romania an Albania are similar in that due to the scarcity of reliable economic information from these two countries, the authors do not try to place the economic reforms or changes in the overall context of economic performance, but are content to analyze the intent of the reforms as contained in government publications and announcements; this they do thoroughly. Thus neither article offers substantial analysis or many conclusions. The authors of the article on Romania, Michael *Kaser* (Oxford) and Iancu *Spigler* (Barclays Bank), argue that the Romanian reforms have, in many ways, recentralized the economy. Therefore, the authors state that the reforms appear to have established "a more pervasive structure of macroeconomic control by the Communist Party." While in Albania, according to authors *Kaser* and Adi *Schnytzer* (Griffith University Brisbane), the Government's sudden refusal of Chinese aid—due both to Hoxha's doctrinal purity and his view of China as an unreliable partner—has resulted in severe strains on the economy and has led the leadership to attempt to increase productivity through some material incentives, production competitions between enterprises and the continued use of moral exaltation. Albania's recent tentative rapprochement with China shows the importance of this relationship.

The authors of the separate chapters have, in sum, written sound articles on their special subjects. As a whole, the book provides, under one cover, highly useful information about the serious problems faced, and methods attempted, by the planners of the East European economies. The articles often complement each other, providing valuable insights not only into the economy under investigation, but into the other East European economies as well. The conclusions reached by the authors are not overly optimistic, and after reading this book, one is left with the impression that, although minor changes can be expected within the socialist economies in the coming years, the persistent economic problems faced by politicians and planners will not result

in fundamental reforms toward introducing market forces within the "conservative" model CMEA countries, while in Hungary and Yugoslavia, a more extensive loosening of economic restrictions is also not to be expected.

D. YOUNG

STANKOVSKY, J.: *Die Bedeutung des Osthandels im internationalen Vergleich.* Wiener Institut für Internationale Wirtschaftsvergleiche. März 1983 (Forschungsberichte Nr. 84) 92 S.

WEISS, F. D.: *West Germany's trade with the East. Hypotheses and perspectives.* J. C. B. Mohr (Paul Siebeck), Tübingen 1983. (Kieler Studien Nr. 179. Institut für Weltwirtschaft an der Universität Kiel. Herausgegeben von Herbert Giersch). XI + 109 S.

Studien, die den Ost-West-Handel behandeln, haben in Ungarn schon immer die Aufmerksamkeit von Fachkreisen erweckt. Besondere Beachtung verdienen Bücher, die sich mit diesem Themenbereich beschäftigen, in der letzten Zeit, wo politische und auch wirtschaftliche Probleme die Ost-West-Beziehungen wesentlich beeinflußt und mitbestimmt haben.

Bei den vorliegenden zwei Arbeiten geht es um bekannte Autoren und berühmte Institute. Das Wiener Institut arbeitet am Thema des Ost-West-Handels sozusagen "hauptberuflich", während die Kieler Forscher diesen Bereich bisher relativ wenig behandelt und für einen bescheidenen Teil der internationalen industriellen Arbeitsteilung betrachtet haben. In gewisser Hinsicht ergänzen sich die beiden Bände: Stankovsky setzt die Tradition des Wiener Instituts fort, die in der empirischen Beobachtung und Beschreibung gegenwärtiger Wirtschaftsprozesse mit Hilfe eines außerordentlich reichen statistischen Materials besteht. Weiss stützt sich dagegen auf eine jahrzehntelange Bearbeitungsmethode des Kieler Instituts und versucht den Handel der BR Deutschland mit den europäischen RGW-Ländern in einen ökonometrischen Rahmen einzufassen und ökonometrisch untermauerte Aussagen zu formulieren. Der mehr ergänzende als "kompetitive" Charakter der Studien macht eine vergleichende Besprechung des Themas schwierig, auch wenn in einigen Teilbereichen gewisse Ähnlichkeiten aufzufinden sind. Deshalb war es zweckmäßiger die wichtigsten Feststellungen der Autoren getrennt unter die Lupe zu nehmen.

Stankovsky's Studie umfaßt die Periode zwischen 1977 und 1981, einen Zeitabschnitt, in dem der Ost-West-Handel seine frühere Dynamik verloren und spezifische, die Perspektiven immer mehr überschattende Züge aufgewiesen hatte. Die Arbeit besteht aus fünf Kapiteln, wobei das erste eine kurze Zusammenfassung der wichtigsten Ergebnisse, das zweite methodische Vorbemerkungen bringt. Mit Recht weist Stankovsky darauf hin, daß der Handel mit den RGW-Ländern für die einzelnen OECD-Länder von unterschiedlicher Wichtigkeit ist. In den letzten Jahren konnte die Sowjetunion ihren Anteil am Gesamtexport und -import des europäischen RGW aus der OECD kräftig erhöhen. Einerseits hängt es mit den höheren sowjetischen Exporterlösen zusammen, die weiterhin eine beachtliche Maschineneinfuhr finanzieren konnten. Andererseits spielt hier der zunehmende Import von Agrargütern eine wesentliche Rolle.

Das dritte Kapitel untersucht die Bedeutung des RGW als Absatzmarkt für den Westen. Nach den eingetretenen geographischen Verschiebungen (höhere Anteile für die USA, Positionsverluste der BR Deutschland) wird die Warenstruktur behandelt und auf die fortschreitende "Naturalisierung" dieser Struktur (immer mehr Agrargüter, aber in gewissem Maße auch Grundstoffe und Halbwaren) aufmerksam gemacht. Da die meisten RGW-Länder die Importe wegen ihrer Verschuldung nicht ausweiten konnten, ja sogar mehrmals zurückschrauben mußten, hat vor allem der Investitionsgütersektor starke Einbußen hinnehmen müssen. Mit Recht verweist der Autor auf die gegensätzliche Bewegung der Maschinen- und Agrarimportanteile, und hebt das relativ stabile Gewicht der industriellen Halb- und Fertigwaren hervor, die der kontinuierlichen Produktion dienen. Da die OECD-Länder ein nicht abzuschätzendes Interesse an der Stabilisierung bzw., falls möglich, an der Ausweitung ihrer Exporte in den RGW-Raum haben, werden sie auch in der Zukunft versuchen mehr Waren, vor allem Maschinen und traditionelle Produkte ge-

wisser strukturschwacher Branchen (z. B. Stahl, einige petrochemische Grundstoffe, Textilien) an die RGW-Länder zu verkaufen. Dies wird aber wohl nur dann möglich sein, wenn die Exporte durch Warenkredite gefördert werden, denn man kann realistisch nicht erwarten, daß die RGW-Länder in den kommenden Jahren einen so hohen Überschuß im Westhandel erwirtschaften können, der nicht nur den hohen Kreditrückzahlungsverpflichtungen nachkommt, sondern gleichzeitig die zunehmenden Westimporte finanziert.

Der vierte Abschnitt befaßt sich mit der Bedeutung der europäischen RGW-Länder als Versorgungsquelle für die OECD-Wirtschaften. Im allgemeinen spielen die RGW-Exporte in den Westen eine bescheidene Rolle im Vergleich zur Gesamteinfuhr oder noch mehr zum inländischen Verbrauch. Gesondert wird hier die Bedeutung der RGW-Länder für die österreichische Wirtschaft behandelt, und vor allem auf die Rohstoff- und Energieimporte eingegangen. In anderen Bereichen (Agrargüter, industrielle Fertigwaren, Maschinen) kommt den RGW-Lieferungen keine nennenswerte Bedeutung zu.

Das letzte Kapitel untersucht gegenwärtige Probleme und Perspektiven des Osthandels in den 80er Jahren. Zunächst geht der Verfasser auf die Verschuldung, als den möglichst wichtigsten Bestimmungsfaktor der Erwartungen ein. Realistisch schätzt er die Lage ein, wenn er bemerkt, daß die Verschlechterung der weltwirtschaftlichen Situation und die "Wachstumszäsur" kurz nach der handelspolitischen Öffnung gegenüber dem Westen einsetzte. In den gegenwärtigen Umständen kann man mit einer Wachstumsrate der RGW-Exporte in den Westen von jährlich 3 bis 4 Prozent rechnen, was schon einem gewissen Positionsgewinn gleichkäme, da der gesamte Welthandel voraussichtlich etwas langsamer wachsen wird. Für Österreich bietet sich die Möglichkeit sich als Transitland noch mehr auszubauen und vielleicht die Importe aus dem RGW zu liberalisieren. Importliberalisierung und Exportkredite können ein wirksames Mittel sein um relative Positionen auf dem RGW-Markt hinzuzugewinnen, zu einer Zeit, wo wegen der voraussichtlich langsamen Entwicklung der Importkapazität dieser Region der Verdrängungswettbewerb zweifelsohne schärfere Formen in den 80er Jahren annehmen wird

Das statistische Material gibt keinen Anlaß um sich mit ihm kritisch auseinanderzusetzen, und dasselbe gilt für die meisten Hypothesen und Feststellungen des Verfassers. Einige kleinere Bemerkungen seien doch erlaubt. Erstens – und vor allem – sind zwar die Aussichten für eine *generelle* Exportförderung (Exportorientierung) des europäischen RGW nicht bedenkenlos, doch kann man sich vorstellen, daß einige RGW-Länder auf diesem Weg beachtliche Erfolge verbuchen können und nicht notwendigerweise auf eine (klassiche) Importsubstituierung als defensive Strategie zurückgreifen müssen. Vieles hängt in dieser Hinsicht von der Wirtschaftspolitik des gewissen RGW-Landes, aber auch von der außenwirtschaftlichen Umgebung ab, in der diese Öffnung stattfindet. Zweitens kann man – trotz Devisenproblemen – mit einer bestimmten Verlagerung der Importe auf Investitionsgüter im breiteren Sinne des Wortes rechnen, da der Modernisierungszwang und auch der Exportzwang es einfach nicht erlauben auf moderne Maschinen, Ersatzteile, eventuell Grundstoffe längerfristig zu verzichten. Drittens sind bessere und engere Zusammenarbeitsformen unter den kleineren europäischen Ländern in Ost *und* West nicht ausgeschlossen, falls man dafür spezifische Lösungsvarianten ausarbeiten kann, die sowohl den politischen als auch den wirtschaftlichen Gegebenheiten Rechnung tragen. In diesem Prozeß dürfte Österreich eine recht wichtige Rolle spielen, die weit über den engsichtigen Schutz des einheimischen Marktes und/oder die kurzfristige Aufrechterhaltung sowieso labiler Arbeitsplätze hinausgeht. Das europäische, ja sogar in einigen Aspekten weltpolitische Ausmaß der ausstehenden Probleme braucht eine gesamteuropäische Annäherung und Lösungsversuche.

Die Analyse des Kieler Instituts bereichert die nicht besonders zahlreiche Serie dieses Forschungszentrums über die sozialistischen Länder. Der Untersuchung liegt eine längere Zeitreihe zugrunde: fast zwei Jahrzehnte des westdeutschen Außenhandels mit den RGW-Ländern sind hier ausgewertet. Die Arbeit konzentriert sich auf den möglichen Zusammenhang zwischen Westexporten, vor allem zwischen der Warenstruktur diese Exporte und den Reformen in den Wirtschaftsmechanismen von drei RGW-Ländern: der Sowjetunion, der DDR und Ungarns.

Nach einem längeren einführenden ersten Abschnitt untersucht Weiss die Theorie der komparativen Kosten anhand des Ost-West-Handels und geht dabei vor allem auf die Rolle der Presie und der Plannung ein. Der Verfasser findet, daß sich die zentral geleiteten Planwirtschaften größtenteils auf sachkapitalintensive Güter spezialisiert haben, weil die zentrale Plannung einfach diese Spezialisierung ermöglichte. Darunter spielen die standardisierten Produkte eine zentrale Rolle, und zwar in nachweisbarer Korrelation zum Grad der Zentralisiertheit der betreffenden RGW-Wirtschaften.

Das dritte Kapitel behandelt die Wettbewerbsstruktur der BR Deutschland im Osthandel und weitet die Analyse durch das Heranziehen mittelmäßig entwickelter oder sich rasch industrialisierender Volkswortschaften aus. Im allgemeinen hat sich die westdeutsche Wettbewerbsstruktur im Osthandel an den allgemeinen Trend (im Gesamthandel und im Handel mit der Vergleichsgruppe) angepaßt. Bestimmungsfaktoren der Wettbewerbsfähigkeit werden theoretisch untermauert und einzeln ausführlich dargestellt. Weiss kann am Ende feststellen, daß die Bundesrepublik in humankapitalintensiven Bereichen klare Wettbewerbsvorteile besitzt, während sie bei sachkapitalintensiven standardisierten Produkten einem stärkeren Konkurrenzdruck aus dem RGW nicht entweichen kann. Die Sektoren, die gegenüber den Entwicklungsländern immer mehr ins Hintertreffen geraten, sind die gleichen, die auch im Ost-West-Handel starke Einbußen hinnehmen müssen (Holz und Holzwaren, Musikinstrumente, Spielzeuge, Sportartikel, Leder und Lederwaren, Schuhe, Textilien und Bekleidung).

Der intraindustrielle Handel bildet das Hauptthema des nächsten Abschnittes. Der Verfasser stellt fest, daß die intraindustrielle Arbeitsteilung im intraregionalen RGW-Handel relativ wenig fortgeschritten ist. Schuld daran sind einerseits der strukturelle Bilateralismus (Maschinenexporte gegen Maschinenimporte, wobei immer der schwächere Partner das Handelsvolumen bestimmt), andererseits die traditionellen Warenströme, die durch sowjetische Rohstofflieferungen und Fertigwarengegenlieferungen der anderen RGW-Länder gekennzeichnet sind.

Zwei kurze abschließende Kapitel beschäftigen sich mit dem Umfang des Ost-West-Handels, sowie den Schlußfolgerungen und Perspektiven. Mit Recht stellt Weiss fest, daß die empirischen Angaben die wirtschaftlichen Bestimmungsgründe des Ost-West-Handels unterstreichen, auch wenn dieser Handel immer starken politischen Einflüssen ausgesetzt war. Das heißt also, daß der Ost-West-Handel aufgrund ökonomischer Überlegungen planbar und vorausschaubar ist. Daraus folgt auch, daß die westdeutsche Industrie weitere Anpassungen vornehmen, und die diesbezügliche Handelspolitik protektionistischen Strömungen keinen Raum lassen sollte. Hinsichtlich der Zukunft meint Weiss, daß weltwirtschaftliche Zwänge und innere Entwicklungen die Anfang der 70er Jahre unterbrochenen wirtschaftlichen Reformprozesse verstärken könnten.

In vielen Hinsichten kann man mit den Schlußfolgerungen der Studie einverstanden sein. Doch scheint es dem Leser so, daß der Verfasser sich komplizierter Zusammenhänge und ökonometrischer Modelle bedient um allgemein bekannte Tatsachen herauszufinden. Eine rein außenhandelsstatistische Untersuchung hätte dieselben Ergebnisse erbracht, undzwar in einer viel verständlicheren Weise und wahrscheinlich mit einer Reihe weiterer interessanter Feststellungen.

Der Versuch, Eigenarten der Warenstruktur mit Reformprozessen in Verbindung zu setzen, scheint originell zu sein. Leider entsprechen die Hypothesen und Schlüsse nicht der Wirklichkeit. Erstens sind die Reformprozesse langfristiger Art, sie können die Exportstruktur nicht schlagartig ändern. Es ist also grundsätzlich verfehlt, aus einsetzenden oder unterbrochenen Reformen direkt auf die Wettbewerbsfähigkeit und Strukturanpassung der sozialistischen Ausfuhr zu schließen. Zweitens ist die Ausfuhrstruktur der europäischen RGW-Länder – mehr als aller anderen sich industrialisierenden oder nach 1945 industrialisierten Länder – mit historischen Hypotheken belastet. Die historische Entwicklung, erstens die verspätete Industrialisierung, zweitens die eigenartigen Wirtschaftsbeziehungen zur Sowjetunion, haben tiefliegende strukturelle Spuren hinterlassan. Drittens entwickelt sich diese Ausfuhrstruktur – vor allem in den letzten 10 Jahren – in einer instabil gewordenen weltwirtschaftlichen Umgebung und ist strukturverzerrenden Effekten (Protektionismus, Dispräferenzen, usw.) ausgesetzt. Der überwiegende Anteil standardi-

sierter Güter am RGW-Export hängt vor allem mit den zwei letztgenannten Faktoren zusammen, und nur mittelbar und nicht immer nachweisbar mit der zentralen Planwirtschaft. (Mehrere verspätet industrialisierte Länder weisen ebenso eine sachkapitalintensive und standardisierte Exportstruktur auf, auch wenn sie ein anderes Wirtschaftssystem verwirklicht haben.)

Ursachen und Konsequenzen der Wirtschaftsentwicklung im europäischen RGW-Raum sind zahlreicher und länderspezifischer als es in der vorliegender Arbeit zum Vorschein kommt. Dabei sollten noch einige Einzelheiten erwähnt werden, die scheinbar nebensächlich, in der Wirklichkeit jedoch von großer Wichtigkeit sind, wie z. B. die Beurteilung und Einschätzung des Pro-Kopf-Einkommens in den RGW-Ländern, die Über- oder Unterbewertung bestimmter Produktionsfaktoren und der nationalen Währungen, und nicht zuletzt die stark umstrittene und im Grunde falsche Vanous-Marrese-These über den "ungleichen Tausch" zwischen der Sowjetunion und den anderen europäischen RGW-Ländern.

Abschließend möchte der Rezensent seinem Wunsch Ausdruck geben, mehrere Studien zum Ost-West-Handel aus dem berühmten Kieler Institut lesen zu können. Die Ost-West-Wirtschaftsbeziehungen bilden einen organischen Bestandteil der internationalen industriellen Arbeitsteilung und sind trotz verschiedener Schwierigkeiten in den achtziger Jahren ausbaufähig. Der Versuch, die Eigenarten dieser Beziehungen festzustellen, würde Lücken schließen, die in der vieljährigen und hochbeachteten wissenschaftlichen Tätigkeit des Kieler Instituts noch bestehen. Auch wenn die auf Mittelmeerländer und sich rasch industrialisierende Volkswirtschaften ausgearbeiteten Hypothesen in diesem Bereich nicht immer funktionieren, dürfte es den Forscher nicht entmutigen. Sicher könnten spezifische Züge, vom Haupttrend abweichende Entwicklungen den bereits fortgeschrittenen Forschungsstand weiter bereichern, und wissenschaftliche Ergebnisse vielseitiger fundieren.

A. INOTAI

AMANN, R.–COOPER, J. (Eds): *Industrial innovation in the Soviet Union.* Yale University Press, New Haven – London 1982. XXX + 526 p.

The first major Western attempts at assessing the level of Soviet technology were born from the panic in the Western world after the launching of the first Sputnik. From this several conclusions were drawn e.g. for the development of American education and research. It seems that since then the Western world has reassured itself and the opinion generally accepted among Western experts concerned with the problems of the socialist countries is that the technological level of the Soviet Union has been further on lagging behind that of the advanced Western countries. Also the authors of this volume maintain this view. In their studies published in 1977 (The technological level of Soviet industry. Yale University Press) they confined themselves merely to the measurement and comparative analysis of Soviet technological accomplishment. They consider this new volume in view of its contents as a second volume in which they present the results of the second and final stage of their research work. Here they take their findings regarding technological level as starting point and in the particular case studies they attempt to expound the systemic and historical causes of this level.

The volume contains eight case studies five of which (machine tools, chemicals, industrial process control and two chapters on military technology) may be considered as direct continuation of the above mentioned preceding volume. Owing partly to personal problems and partly to the absence of adequate data it was not possible to continue four of the case studies (iron and steel, electric power, space rocketry and computers). Taking into consideration the increasing significance of computerization, we feel it especially a loss that the latter study remained "unfinished". The feeling of want is to a certain extent mitigated by the fact that one of the three case studies which appear as new subjects in comparison to the first volume deals with the automated management system which is an organizational innovation strongly connected with the existence and development level of computers. Another new subject is group technology which is in close relationship with the develop-

ment of the machine tool industry and as such makes it possible to carry out some comparisons.

According to the experts in the West, the causes of Soviet relative backwardness are to be found mainly in the current economic control system. The standpoint of the Soviet researchers is, on the contrary, that it is primarily the initial economic backwardness (in 1917) and, subsequently, historical misfortune (Civil War, World War Two) which account for present technical inferiority. The authors of the volume start out from the idea that both approaches may contain enough coverage of reality that justifies serious exploration of them. They emphasize three elements which must be present in the explanation of the level of Soviet technology:

1. To what extent and in what ways does the Soviet system of economic control promote or inhibit innovation? They refer to this as the *systemic perspective.*
2. How backward were–if at all–particular Russian technologies in 1917, how rich was the USSR in relevant resources and skilled manpower and, respectively, how damaging were the misfortunes of history (wars, etc.)? They call this the *historical perspective.*
3. To what extent is the backwardness of different fields the result of *government policies and priorities?*

From the systemic characteristics the following may be stressed according to the authors: the absence of competition and direct relationship with the customers are some of the most potent factors impeding innovation in the USSR. The incentives encouraging the fulfilment of quantitative plan instructions and targets do not make the enterprises interested in technological development which might result in changes of quality.

Also the rigid system of central price-fixing inhibits efficient technical development, namely the prices of new products are often set too low to reward the firms adequately for their efforts towards innovativity. In other cases it results in pseudo-innovation whereby, referring to non-existent values of novelty, a clever enterprise may achieve a price prevailing and containing surplus profit throughout a number of decades.

In the stimulation of the research and development (R and D) organizations several shortcomings may be experienced. In many cases the criterion of plan fulfilment is the utilization of the budgetary allocations rather than the completion of projects, an arrangement which clearly encourages the proliferation of projects. As the relationship between the research and development institutes and the production plants is rather loose and, at the same time, in industry R and D activities are almost negligible, there is a significant rift created between research work and the implementation of its results, – say the authors.

The complex organizational network of industrial administration exerts its influence also on innovation which is, in addition, affected also by the endeavours of other central bodies aimed at creating a clearer situation. Bureaucratism as the result if this is, according to the authors, a crucial obstacle to innovation and makes rather difficult even the importation of Western technology.

From the analysis of the historical perspective the conclusion is drawn by the authors that backwardness prior to 1917 was true in many fields, though there were non-negligible exceptions (e.g. the highly advanced basic research in chemicals), but the influence of the mode adopted for seeking to overcome that backwardness has had at least similar significance. The method was centralization also in the R and D sector which has led, according to the authors, to the aforementioned rift and, respectively, to the copying of Western technologies which in turn resulted in a comfortable behaviour of industry.

The authors do not deny the extensive damages caused by World War II but emphasize that the new industrial technologies acquired by Lend-Lease and in the framework of German reparations had a rather strong effect. They acknowledge that in respect of the measure of expenditure and manpower spent on research the Soviet Union is top ranking in the world. The provision of the development phase is, however, not as favourable as that. The picture is deteriorated by the effect of priorities. The spreading consequences of such priorities are hardly predictable, whereas the most pressing disproportions originate from them (e.g. the permanent backwardness of the chemical industry).

The shortcomings of industrial innovation and the resulting technological gap represent in the

authors' opinion rather serious problems facing Soviet leadership, especially with respect to the permanently declining rate of economic growth. In a specific manner also the rate of growth of R and D budget decreased too, so that in the past years these spendings represented a declining share of the national income. Whereas, after the sources of extensive growth had been exhausted, industrial innovation remains the only resource of the announced intensive growth strategy.

To make further progress, however, the reform of R and D organization is inevitable, attempts at which were already made (the creation of science-production complexes, accumulation of the financial sources into consolidated funds in certain industrial branches, experiments to apply the programmed planning approach, etc.). But, according to the authors, these attempts at reform remained on the surface and were unable to bring about radical changes.

The nine chapters following the first one of synoptic character make readers acquainted with the detailed problems in particular innovation areas of key importance.

The second chapter presents the experiences of innovation in the machine tool industry. The Soviet machine tool stock is larger and heavier than that of the United States. According to analyses made on the basis of a small sample, technical development is slow and its level not too high. The author of the chapter at the same time states that for instance in the case of the NC machines which belong to the nowadays most developed category, after an initial hesitation a rapid development in quantity started and currently the USSR produces about 50 percent more NC machine tools than the USA. True, these are still mostly simple, so-called hybrid types (containing an electronic controller with a conventional machine tool). In spite of this –or just because of it– the imports of Western NC machines have been strikingly growing with the apparent aim of diminishing the nevertheless existing gap.

The third chapter is concerned with the so-called Group Technology the essence of which is to take into account in planning and manufacturing the underlying sameness of the various items and of the process used for their production. This means practically that by using some system of classification, product families are set up, furthermore, the machines suited for their manufacture are also arranged in groups. As a result, on the machines of the same group several families of products can be manufactured. The procedure is, as a matter of fact, a further development in typifying the components, its advantages are acknowledged also in the West. Though its basic principles were developed in the Soviet Union, its practical use has not yet become general.

The fourth chapter analyses the problems of development and innovation in the chemical industry. The yardstick of effectiveness in innovation is the implementation of the results of research into production or, respectively, the speed by it is done (research-production cycle). Especially in the phase of basic research flexible work is hindered by rigid budget restrictions (quarterly or even monthly limits of spending). The problems arising in the periods of the plant design and construction phase are not specific to the chemical industry. The so-called assimilation phase in which the output of the plant does not reach its full capacity and certain minor modifications of the technology are carried through is on the average 3 years that cannot be considered too long. Taking the whole of the cycle into account, experience shows that despite its priority positions and higher than average supply of resources, chemical industry has been unable to achieve resounding success.

The fifth chapter deals with the management automation programme. The author finds that applying controlling and planning methods instead of a deep-going reform of economic control and management was rendered possible by the achievements in the development of computers or, respectively, the wide spreading of these machines. Though the gap between Western and Soviet technology level has not become narrower, the number of computers reached the critical point where on all levels of economy and society it became possible to use computers for planning and management. The majority of applications realized so far were production process control, wage accounting, etc.

As shown by the sixth chapter discussing the problems of the sector producing control instrumentation for industrial processes it is character-

istic here too that, despite several successful own achievements, a strong trend to copy Western equipment appears which again is a proof of backwardness.

Two chapters are dealing with innovation in the defense sector.

The ninth chapter is concerned with the absorption capacity of the Soviet economy in respect of foreign technology. The copying of reversed engineering character of the 1940s and 1950s were in the 1960s and 1970s, during the period of détente policy, replaced to the major part by commercial technology transfer. The quantitative share of this in the imports has been considerably exceeded in respect of its effects.

Economic absorption of Western technology is impeded by several factors: the Soviet system excludes direct foreign investment in the USSR and weak personal contacts aggravate the "discovery" of technical novelties in due time. The factors impeding innovation as mentioned before in various contexts (quantity-oriented views, the separation of research and production, etc.) are obstacles also to the adoption of foreign technology. The administrative separation of the foreign trade organizations from the enterprises which are supposed to be users of the technology to be imported tends to slow down and distort the information flow to the users and subsequently hinders rapid settlement of the transaction.

The author of the tenth, the closing chapter in connection with the efforts of renewing the innovation system states that the lack of dramatic changes must not be treated as an absolute. In his opinion undoubtedly some changes took place in the organization, planning and control of R and D, which may become sources of further favourable changes. He maintains that most important has been the creation of the so-called "science-production complexes" which are to reduce the exaggerated organizational separation between research, development and production. It is true that most of them were gradually re-established into traditional associations of production but the results in product development achieved by the surviving few exceptions are promising.

The authors of the volume analyse their subject in a diversified way, using the relevant literature and other sources of information. But the uncertainty of their sources of information shows at several places in an open manner, at others in a hidden form. Although the studies also stress positive features, the whole of the volume is permeated by underestimation of the Soviet technological level. Of course, Western analysts are not in an easy position. The smaller participation of the Soviet Union in international trade than is the case with other countries –which also derives from the size of the Soviet Union–makes the achievements of Soviet industry and technology less transparent than those of other countries. Therefore, highly complicated procedures of comparison had to be frequently used – they had been elaborated in the former volume mentioned in the introduction to the book. But these procedures also comprise a great many elements open to challenge and this renders relative a part of the "achievements" shown in this book. Among the deficiencies of Soviet technical progress listed in the book there are a lot which are frequently blamed in Soviet literature and also in political declarations. The authors acknowledge that several steps have been taken to eliminate these deficiencies. But most of the objective Western analysts do not share the misconception that planned economy ought to be abandoned in the interest of faster technical progress.

A comparison of technological levels among countries can never be full-scope. The results of comparison depend mostly on the composition of the fields selected for comparison. It is, however, a justified question to what extent the sample represents the whole. Finally, it may be raised whether an investigation aimed merely at the comparison of technologies yields relevant results. It is known that–for historical reasons– the per capita income is even today much lower in the USSR than in several developed Western countries. Thus the question may also be formulated by asking whether the general level of Soviet technology is lagging behind or exceeding the one that can be assigned to the general Soviet level of economic development. The answer to this question is rather unambigous: the Soviet technology attains and partly even exceeds that

level, which is also supported by the data of the book. As a matter of fact, not only the actual potential of the economy, but also the efficient use of technology depend on the harmony of these two factors, i.e. the level of economic development and the technology applied.

Soviet technology was able to achieve superiority in several areas on a world scale (e.g. space travel) in the past; it is already superior in some fields today, and will very likely be able to acquire such advantages in the future as well.

A. TÓTHFALUSI

BOOKS RECEIVED*

AUGUSZTINOVICS, M. (ed.): Long-term models at work. Akadémiai Kiadó, Budapest 1984. 384 p.**

BISZTRAY, Á. (ed.): Abstracts of the selected publications issued in 1982. Bulletin, No. 53. Research Institute for Agricultural Economics, Budapest 1983. 106 p.

BOGÁR, L.: A fejlődés ára: gazdasági nehézségeink főbb okainak történeti aspektusa (The price of development: A historical aspect of the main causes of Hungary's economic problems). Közgazdasági és Jogi Könyvkiadó, Budapest 1983. 189 p.

BOTOS, K.: Pénz – nemzetközi pénz (Money, national and international currencies). Közgazdasági és Jogi Könyvkiadó, Budapest 1983. 219 p.

DÁNIEL, T.: A piac a gazdaságirányítás szolgálatában (The market helping the management of economy). Közgazdasági és Jogi Könyvkiadó, Budapest 1983. 291 p.

ESTRIN, S.: Self-management: economic theory and Yugoslav practice. Cambridge University Press, Cambridge 1983. 266 p.**

FALUVÉGI, L.: A tervezés mai értéke: gazdaságpolitika és társadalmi tervezés a hatodik ötéves terv időszakában (The present value of planning: Economic policy and social planning in the period of the sixth five-year plan). Kossuth Kiadó, Budapest 1983. 468 p.

GÁLIK, L.: A normativitással kapcsolatos értelmezések és kísérlet a normativitás érvényesülésének körvonalazására (Explanations connected with normativity and an attempt to outline the realization of normativity). Pénzügykutatási Intézet, Budapest 1983/4. 96 p.

GARA, J.: A tőkés jövedelem-újraelosztás szociálpolitikai vonatkozásai Olaszország példáján (Social-policy aspects of the capitalist income redistribution on the example of Italy). Közgazdasági Értekezések, No. 31. Akadémiai Kiadó, Budapest 1984. 182 p.

GVISHIANI, J. M. (ed.-in-chief): Systems research. Methodological problems. Pergamon Press, Oxford 1984. 260 p.

HALÁSZ, P.: A mezőgazdasági kistermelés megítélése fővárosi dolgozók körében (Estimation of small-scale agricultural production among workers of Budapest). Agrárgazdasági Kutató Intézet, Budapest 1983. No. 14. 71 p.

HOÓS, J.: A népgazdasági tervezés és az új növekedési pálya (Planning of national economy and the new path of the economic growth in Hungary). Kossuth Kiadó, Budapest 1983. 157 p.

JENSEN, J.–J.: Sovjetunionen i verdensøkonomien. Sydjysk Univesitetsforlag, Esbjerg 1984. 70 p.

JUNG, H.: Koordinationsaspekte in der stationären Krankenversorgung. Osteuropa-Institut an der Freien Universität Berlin, Berlin 1983. 272 p.

KALÁSZ, I.–SZEPESI, GY.: A kisüzemi gazdálkodás új formái (New forms of the economic activity of small farms). Kossuth Kiadó, Budapest 1983. 121 p.

KUNVÁRI, Á.: A gazdaságfejlesztés irányításának alapkérdései: a gazdálkodási egyensúly feltételeiről (Principal questions of the management of economic development: The conditions of the economic). Közgazdasági és Jogi Könyvkiadó, Budapest 1983. 226 p.**

* *We ackowledge the receipt to the enlisted books. No obligation to review them is involved.
**To be reviewed in Acta Oeconomica.

A magyar gazdaságirányításról (Management of the Hungarian economy). 1–2. Kossuth Kiadó, Budapest 1983. 412+427 p.

MARTIN, S.: Market, firm and economic performance. The Monograph Series in Finance and Economics. Monograph 1983–1. New York University. 74 p.

RADUCZINER, ZS.: Die ungarische Wirtschaftsordnung heute. Peter Land, Bern-Frankfurt Main 1982. 300 S.

STAHL, E.: Sovjetunionens nye enhedsuddannelse. Mennesker – mål – metoder. Sydjysk Universitetsforlag, Esbjerg 1984. 86 p.

SZABÓ, F.: A mezőgazdasági termelés gazdasági szabályozása (Economic regulation of agricultural production). Mezőgazdasági Kiadó, Budapest 1983. 136 p.

TIMÁR, M.: Gazdasági egyensúly és pénzügyek (Economic equilibrium and finances). Közgazdasági és Jogi Könyvkiadó, Budapest 1983. 232 p.**

WILCZYNSKI, J.: Comparative industrial relations. The Macmillan Press Ltd., London–Basingstoke 1983. 256 p.

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FURTHER DEVELOPMENT OF THE SYSTEM OF ECONOMIC CONTROL AND MANAGEMENT IN HUNGARY*

F. HAVASI

In April 1984 a gradual development of the system of economic control and management was decided on in Hungary. Important steps will already be taken in 1985. The author of the article, Secretary to the C. C. of the HSWP, discusses the contents, causes and goals of the changes in the institutional, organizational and regulatory systems.

The process of developing the system of economic control and management

Beginning with 1957 the HSWP has made efforts at devising a system of economic control and management which serves the implementation of economic policy taking into account the general laws of socialist development and international experience, adjusting to changes in the external and internal conditions of economic development in keeping with the specific features, conditions and potentialities of the Hungarian economy. The Party is of the opinion that the raising of living standards in harmony with the material and economic possibilities, and the increased incentives for the working population based on their interests are important propelling forces of progress.

In the course of developing the system of economic control and management of the economy, the first step was the end of the compulsory delivery of agricultural products and the introduction of contractual production and procurement. The incomes of wage earners were linked more strongly to enterprise results already beginning with 1957; starting with the price reform of 1959 a system of prices better reflecting inputs was established. Between 1963 and 1965 the industrial directorates ceased to exist as medium control agencies, and some large enterprises obtained the right to export independently. The cooperative movement was enriched by several new features.

Political, social and economic consolidation and the successful conclusion of the socialist reorganization of agriculture allowed, and the diminishing opportunities for extensive development demanded, that–as an organic continuation of the preceding steps–the system of control and management should be reformed in a comprehensive way.

*Based on an address to a session of the CC, HSWP, on 17th April, 1984, and a lecture to the Political Academy of the HSWP, on 25th April, 1984. See p. 363 of this issue for the Declaration by the Central Committee. (Ed. note.)

Thus, such development is nothing new in Hungary. Relying on the antecedents and the experiences we provided for the introduction of a system that corresponds to the objective laws of the socialist economy, takes into account the size and conditions of the country, the outstanding importance of international economic relations, the significant role of agriculture, as well as the given development level of the economy, and the necessity of starting to shift to the intensive stage of economic growth.

The reform introduced in 1968 was a significant step. We then shifted to novel planned controls, operating basically with economic methods. The autonomy of enterprises and their freedom of movement significantly increased, they approached more closely to the market, their ability to decide and undertake gradually improved. This helped in bringing to the surface the reserves inherent in management, improved efficiency, and developed economic thinking and the economic approach.

Practice has shown that the instruments of indirect regulation can be successfully applied in a socialist planned economy, that central planning can be organically coupled with the objectively existing commodity (market) and monetary relations, and all that does not lead to anarchy in economic life, nor to turning away from socialist ideals in ways of thinking.

It has been proved that a market regulated by prices, rates of exchange, taxes and credit and other instruments creates such conditions for economic units, and raises such requirements towards their decisions which may successfully help in implementing the objectives of the national economic plans. At the same time, the signals given by the regulated market have an important role in shaping the ideas of the plan and in controlling them.

Not only the economic but also the social and political effects of the reform were favourable. They promoted the growth of the independence of local government, the evolution of their functions as representative bodies of the people, the development of regions and settlements, it helped trade union activities, furthered cooperative policy, developed democracy in social life and improved the political atmosphere.

In the 16 years since its introduction we have obtained reliable data concerning the functioning of the reform. Today it can already be clearly seen that the ideas formulated in the 1966 resolution of the CC were on the whole correct and realistic. This is true even if there were assumptions that were not proved in practice or which could not be implemented. Suffice it to mention in this context the necessity for further developing the system of producer and consumer prices, the price mechanism, or the regulation of wages and earnings which had been recognised already at that time.

At the time when the reform was worked out and introduced, a favourable world market situation, even one that might further improve was still reckoned with. Under such conditions it seemed realistic to make efforts at a consistent linking of external and internal markets, and at creating the conditions for continuous adjustment to change. Economic control set out from the assumption that in a relatively short time internal market relations bringing about a slight excess supply would develop and prices and profits would be able to express the efficiency of work in enterprises. But the

expectations attached to the realization of these conditions proved to be exaggerated.

At the time of the introduction of the reform there were also insufficiently clarified assumptions, such as those related to the role of import competition, to the differentiating effect of economic coercion, to the forms of capital regrouping, which were not cleared up in the course of practice either. To this was added that the system of central control and enterprise organization has essentially remained unchanged from the introduction of the reform up to recent years. The division of labour between the ministries and the enterprises was not altered for quite a long time and thus the desirable system of relations failed to develop. Enterprise autonomy developed in a contradictory manner and more slowly than desirable.

The functioning of the economic mechanism was considerably influenced by the fact that, beginning with 1973, the world economic conditions of development also changed radically and became much more difficult than had been expected. Hungarian economic policy, however, failed to react to the changes in time. Indeed, at that time there still were greater opportunities for action than at the end of the decade; foreign trade was balanced and the debt in convertible currencies was not significant either.

We recognized the tasks deriving from the new world economic situation only to some degree in 1974–1975 and thus did not grasp the still favourable opportunities. Hungarian economic policy reflected the assumption that although the deterioration in the terms of trade would last, the extent of the price losses would diminish. Setting out partly from that notion, and partly from the assumption that efficiency could be improved at a fast rate, and that the structure of production could be transformed in a short time, an economic policy decision was taken to adjust to the changed conditions by a continued rapid development of production, and that living standards should be perceptibly raised.

Life has not confirmed such notions. Because of the huge price losses due to the deterioration of the terms of trade the domestic use of the national income lastingly and essentially exceeded its production, and this had to be financed by foreign credits.

The resolution of the CC in October 1977–on foreign trade and the production structure–formulated important recognitions and tasks. It disclosed the weaknesses of international competitiveness and marked out the most important things to be done. The system of instruments devised for its implementation, however, was not effective enough. On the one hand, it tried to operate advantagenously on the market through central measures and, on the other, it wished to improve the product pattern in a direct manner, by relying on rigid technological and economic criteria.

Enterprises and regional bodies aimed at an unjustified stability, and were supported in this by the central economic management. Decisions were frequently taken at a higher level than necessary and this also delayed reaction to changes. The organizational system of the economy had become rigid.

In this situation the changing of economic policy practices and elaboration of the development of the system of control and management became more and more urgent. This is why the CC passed a resolution in December 1978, in the wake of which changes

were made in the practice of economic policy and economic control. Economic work centred on improving external equilibrium and on preserving attained living standards.

A balance of the last five years

The economic policy guideline determined in 1978 has already been followed for six years and, in spite of the continuing deterioration in external conditions, considerable progress has been made in implementing the main objectives of economic policy.

Experience has shown that the economic policy guidelines marked out, and the practice of economic control and management, as well as the system of instruments serving its implementation, proved to be sound and successful—even including the criticized central interference.

The most important achievement is that the process of growing indebtedness has stopped and in the last two years a modest surplus has been attained not only in the balance of trade but also in that of payments. We have succeeded in increasing exports accounted in convertible currencies at a time when the whole of the world economy was hit by recession. Simultaneously, we have succeeded in reducing the volume of imports from economically developed countries and thus the vulnerability of the economy. It is an important achievement of this period that—partly because we were forced to, partly because the necessity has been recognized—more economical practices were initiated. In these days, e.g., the country consumes 20 percent less crude oil, and 10 percent less petrol than 5–6 years ago, although in the meantime both industrial and agricultural output has increased and the stock of motor vehicles is growing by 80–100.000 cars annually. All that also proves that earlier much energy was wasted. It is also well known that the products of Hungarian industry contain more materials than would be necessary, that 20 percent of working hours are not properly exploited, and that we have a great deal to make up for also in plant and work organization—even in comparison to the socialist countries. All these mean unexploited reserves.

It has been an important result of the last five years that we have succeeded in restoring harmony between the creation of national income and its domestic utilization, as against the preceding period when we consumed more than what was produced.

Living standards could be maintained on a society-wide scale and living conditions also could be improved. Real income and consumption increased, if only slightly. Real wages declined by 7–8 percent. Beyond the relatively slow growth of performance, the reason is that, because of automatisms and guarantees built into social policy, social benefits had to be increased at a relatively rapid rate and this reduced the possibilities for raising wages. As a consequence, the ratio of labour incomes diminished within the total income of the population, while the ratio of benefits in kind and money increased to about 32–33 percent. Therefore, one of the important tasks of the coming years is to halt the decline in the ratio of wages and then to shape it in a manner that the basic social achievements be further maintained.

We are also aware of the fact that the results attained in improving the national economic equilibrium are not sufficiently stable because they have come about mainly by reducing the domestic use of national income–first of all accumulation. A stable equilibrium, asserting itself in the long run as well, can and has to be attained only through a transformation of the structure of production, by increasing competitiveness and, as a result, by improving the performance of the Hungarian economy.

Analysing the results and anxieties of the last five years it has also become clear that the opportunities inherent in the present practice of economic policy are on the verge of exhaustion. Improvement of the external equilibrium cannot be based in the long run on the reduction of domestic consumption. Further restriction on investment would endanger technical progress, aimed at updating the production structure, and a further significant reduction of imports would hinder continuous production and the profitable expansion of exports. Nor can a practice be continued which puts the main burden of improving equilibrium on the well managed and profitable enterprises and cooperatives in order to help less efficiently operating economic units. While living standards have been maintained society-wide, falling real wages, and the rise in consumer prices give rise to growing concern, as does the fact that the living standards of some families, and persons living on their own, are deteriorating.

Why must the system of control be changed?

The further reform of the system of economic management and control has always been accompanied in Hungary by extensive discussion. This is only natural in view of the importance of the matter.

At the present stage views widely differ. There are some who, exaggerating to role of the market, thinking in theoretical terms, make attempts at outlining management models. This, to use a fashionable term, is reform-radicalism. Others–the overcautious–hold that too much has been done already in the reform of the economic mechanism. According to them, since we possess a valid resolution on almost everything, it is these resolutions that have to be implemented–the best thing is thus to do nothing. Others ask, with some justification, whether the proposals offer a socialist solution to our ills, whether they effectively serve our socialist goals.

A full answer to these questions can, in the last resort, only be given by practice. One thing is, however, certain: the greatest damage would be done by delaying action. It is no mere coincidence that almost every socialist country on the same development level as Hungary is engaged in improving the system of economic control and management in an approach deemed by them to be the most expedient.

The unfavourable external and internal conditions of management urgently demand–and the Hungarian discussants agree–that the main goals of economic construction have to be further pursued: the conditions of equilibrium have to be improved, the attained achievements protected, and the economic conditions for a more

dynamic progress have to be established. But this is only possible if the economy can shift to the course of intensive economic development, if it can better adjust to the changing circumstances, if its performance and competitiveness improve.

For a more dynamic growth of the economy, and for raising living standards more resources must be made available than is the case at present. The question arises: from which source may the Hungarian economy expect favourable impacts that would allow an expansion of resources?

One of them might be an upswing in the world economy that would also facilitate a growth in exports even in the present structure. But there is little hope of that: international forecasts do not support the probability of a strong upswing.

It would provide a stimulation if credits were offered on money markets in abundance and with low rates of interest. But this cannot be expected in the foreseeable future, because the main concern of the financial world now is how to secure repayment of the outstanding $800 billion credit.

Our situation might be favourably affected if economic relations with the socialist countries could be more rapidly expanded. We are making such efforts, but it must be borne in mind that most of the socialist countries are fighting with similar troubles and difficulties as we are. They too, moderated the rate of growth and stressed efficiency and quality requirements.

A single realistic opportunity has thus remained for providing the foundations for faster progress: the efficiency of the Hungarian economy, its value creating ability has to be enhanced in order to cope with existing anxieties. We can only attain our basic economic objectives, if we significantly accelerate improvement of the efficiency of production, the raising of labour productivity, the transformation of the economic structure, technical-technological progress, and more economical use of materials and energy, as well as substantially improve the quality of products. Acceleration of intensive growth can be secured in the Hungarian economy only in this manner. We do possess the potentialities but it is also necessary that every obstacle holding back performance should be removed from the way of improving economic performance. This should be done even if we were not under pressure.

In this way we may counterbalance the burdens related to the deterioration of international economic relations, maintain our solvency, consolidate our positions in the world economy, improve our chances in further developing mutually advantageous cooperation with the socialist countries, particularly with the Soviet Union.

Further reform of the system of economic control and management is an indispensable condition of all that. Further development is also urged by the fact that, given the presently available tools of the economic mechanism, it is even difficult to maintain the present performance level. The gap between us and the world pioneers would grow, not only in respect of technical progress, but sooner or later also in living standards. People see that, and if they do not feel a favourable change, or they do not judge the prospects to be good, this may imperil even our cautiously guarded domestic political stability.

Main directions of further development

Arguing from our economic policy objectives, from the experiences with the operation of the economic mechanism, and from the expected development of the foreign environment the conclusion follows that we have to carry on with the reform of the system of economic control and management. The proposal relating to further development has three important points of emphasis:

- the first is the strengthening of central control, that is, of governmental work, and an improvement in its efficiency;
- the second is greater enterprise autonomy, that is, the creation of conditions for a more enterprising behaviour on the part of firms;
- the third is to work out such institutions, organizations and instruments which ensure the improvement of the efficiency of both government activities and enterprise management.

We are familiar with the strong and the weak elements of the system; we are aware of what has stood the test, what could not be implemented and what must be changed and this is a sound basis.

In its entirety, further development involves a series of complex and graduated measures. It is complex in the sense that the changes extend over the whole field of economic control: planning, the system of economic control, regulators, the system of institutions and the human resources, creative, productive work. By graduality I mean that not every measure is taken at the same time, but over the duration of a medium-term plan. But this graduality does not interrupt the uniform system.

Improvement of the efficiency of central control

National economic planning has to forecast and take into account possible changes in the world economy in a more reliable manner in order to be able to minimize related errors and losses due to them. The open nature of the economy and the necessarily ensuing consequences have to be reckoned with in a realistic manner. Planning has to better explore different features of the markets of the socialist, the developing, and the developed western countries bearing in mind their expected impact on the Hungarian economy.

Planning has to better respond to the requirements of the intensive stage of development. To achieve this the still existing quantitative approach, and surviving habits, inherited from the extensive stage of development, have to be eliminated and efficiency, quality and the economic processes serving them have to be firmly placed at the centre of attention. For this purpose the methodology of planning, the system of indicators and comparative indexes have to be modernized and made suitable for expressing the

qualitative features of development. It is necessary that planning deal in a more comprehensive manner and more efficiently with the processes best helping the income producing ability of the economy, applying a selective development policy, eliminating activities that do not pay, paying due attention to the quality aspects of investment activity and to problems of equilibrium.

No doubt, acceleration of technological progress is an important condition of more dynamic economic growth. It is true that technical progress basically depends on available resources, but it also depends considerably on economy-wide planning. Whether or not the national economic plan correctly defines the direction of technical progress to be followed and thus the technological orientation of the country, greatly influences the actually implemented development projects, and their efficiency. Both international comparisons and our own experience unambiguously show that there are significant reserves in planning in this field. The scarcity of resources available for investment only underlines the need to make progress.

Planning has to concern itself more and more with social processes in the future. On the one hand this necessitates that the social processes closely linked to the economy, such as social policy, the school system, the training of skilled staff, participation in and access to culture, be fitted into planning in a more organized way and that social justice be more evident in the allocation of the goods of this world and, on the other hand, that the interrelation of social and economic processes be better reckoned with and deliberately structured, furthering and strengthening progressive elements.

Given the expanding sociological nature of planning, and the higher degree of decentralization and enterprise autonomy, the role of the plan increases in promoting enterprise contacts and cooperation. Economic regulation should be given more scope as well in the interests of creating the right conditions for cooperation among enterprises.

These and similar changes will make national economic planning better suited to serve the purposes of economic policy, absolving it of its commitments to details, and relaxing that rigidity which objectively follows from its intermittent nature. They will make it possible for planning to grow from an accountant of production and an allocator of resources into an agent shaping incomes, the adaptivity of the economy and of social processes, and a recorder and reconciliator of diverse interests.

The strengthening of economic control on the part of the government is not in contradiction with the planned growth in enterprise autonomy. On the basis of the national economic plans the socialist state can continue to keep firm control of the socialist commodity producing economy, regulating it—e.g. with the instruments of fiscal policy, through the banking system and as part of market surveillance.

In this respect the main direction of the changes is to strengthen the uniform governmental character of economic control. At present the central will is frequently impaired along the diverse channels of functional and sectoral economic control agencies. From this aspect it is particularly important that the continuous government control activity, working within the framework of the national economic plan, and applying basically indirect control instruments should be able to influence production and trade

processes with increasing efficiency to implement the goals of economic policy. The proposals are aimed at further developing central market surveillance in this spirit.

In the development of governmental control acitivity, in making it more effective, it is also an important task that, instead of their present over-operative activity, the sectoral ministries* should become such organs helping the economic policy of the government, shaping sectoral policies, taking an active part in planning and control, and providing foundations for international cooperation which are at the same time respected authorities. Also the working methods of the functional ministries have to be improved, By changing their internal structure and their approach to control they must help in creating enterprise autonomy and efficient governmental work.

Growing enterprise autonomy

Another important direction of further development is growing enterprise autonomy. Some ask, however, if wide rights of disposal over property are given to enterprises, does this not lead to a weakening of the central government will, to an undesirable strengthening of group interests?

It is in order, when answering this question, to refer to the experience of the Hungarian cooperative movement. The weight of this sector is indicated by the fact that about 90 percent of agro-businesses are cooperatives which–together with the closely integrated household plots–produce more than two thirds of agricultural output. Hungarian cooperatives also contribute about 6 percent of the output of the socialist industry and transact about 40 percent of retail trade. Even prior to 1968, cooperatives were exempt from the obligation of plan fulfilment and had ownership rights much wider than those of state enterprises. Today we know that this wider autonomy helped the evolution of a responsible enterprising managerial behaviour. Cooperatives have never taken decisions that were irreconcilable with the basic objectives of economic policy, and what is more important: thanks to their work the image of agriculture and, with it, that of the Hungarian village has fundamentally changed. The merits of cooperatives are beyond dispute when it comes to health, education, entertainment and other communal services in villages, and their economic achievements speak for themselves. It was there that certain methods of management that served as models for others were born and became general practice. We now wish to apply such over a wider field as well, e.g. production systems, the agro-industrial unions, joint ventures, flow of assets among units, sensitive and flexible reaction to market fluctuations.

We can be sure that those working for state enterprises–led by the workers of key industries–will also show responsibility in using their increased autonomy.

*By sectoral ministries those controlling various branches of economy, as industry, agriculture etc. are meant, while functional ministries as eg. the Ministry of Finance cover the whole economy. (Ed. note.)

In recent years also the organizational system of enterprises has taken steps forward. Let us only think of the newly created independence of units and smaller enterprises that are part of national enterprises and holding companies, of the abolition of several bodies of middle level authority, and of the gradual extension of the right to trade abroad (at present more than 200 enterprises have export and import rights). The progress made by the institutional system of enterprise management is also shown by the fact that supervisory boards, and boards of directors with rights of decision have been active for some time and the bodies of shop-stewards have a decisive role in enterprise wage and social policies.

The further development of the forms of management and of the economic control system is designed to serve the coming into being and strengthening of responsible enterprise management. The planned measures affect basically the forms of operation of state property and, within that, particularly that of state industry. The proposed new forms of management may provide foundations for developing the ownership-consciousness of workers and their role as "boss", by drawing them increasingly into collective management and, in the long run, by creating their interest in property. Social property remains indivisible and the all-national nature of state ownership will grow.

We know that socialist industry, and within it the large enterprises, must increasingly become the focus of progress. Conditions have to be created under which the large enterprises can carry out their duties better than now, so that they become the real driving forces of economic growth. We want to be able to prove that the socialist large firms can act as pioneers in technical and technological progress, in disciplined work and job organization. They have to perform above the average, being more profitable, paying better wages and offering superior social policy benefits. They must be able to attract the best type of worker, and prove that neither the Economic Teams* nor any other type of simple organization now current in Hungary can be competitive with them. This, however, must be based not only on a suitable economic environment, but also on a further improvement of the internal functional mechanism of large firms. What is more. the latter is of even greater importance when it comes to the proper flourishing of talents and a high morale among the workforce. The conditions for all this can be established, and, given this approach, the further reform of the system of management and control is focussed on industry and the large enterprises.

So far the ownership rights of the state in relation to state enterprises have mostly been exercised by state administrative bodies. Experience has shown that the advantages of this practice have waned over time, while its disadvantages have waxed. Given the present practice of ownership rights over state property there is little scope for socialist enterprises to operate as true ventures. The purpose of the change is that, while maintaining the state character of ownership, the mode of disposal over property and the exercise of the employer rights should be made more efficient.

*Economic Teams can be formed either as autonomous businesses or within firms, working after the end of the offical hours. (Ed. note.)

Practice has shown that the sectoral ministries now possess two kinds of rights–those of ownership and control–which are becoming increasingly incompatible. Our opinion is that the ministries are competent in controlling the operation of enterprises, but interest in ownership and in wealth cannot develop with them to the necessary degree. This contradiction is intended to be overcome by the declaration of the CC, which–apart from separately indicated exceptions–determines that the exercise of some rights of disposal over property and of employer rights *vis à vis* top enterprise management should be ceded to the enterprises and their supervision in terms of the appropriate legislation should be suitably amended.

The declaration recommends the use of three kinds of enterprise management. In the enterprises under the control of state administration the mode of exercising ownership rights will not change relative to present practice. In their majority these are public utility or communal enterprises or such which are so classified by the government on the basis of other considerations. We wish to further develop the internal control and management system of holding companies (trousts); it is thought that their relations with the economic control agencies will not change. In this form of control the enterprises may create Management Councils, as well as supervisory committees that also include the main consumers of their products and services. Applications will be considered for appointments to executive posts through competition and they will generally be for a limited term.

The resolution includes two new forms of enterprise management. One is the enterprise council suggested for the management of medium and large enterprises, and the other elected management proposed mainly for smaller state enterprises. I should like to stress that in the case of these two new forms of enterprise management the corporate bodies do not restrict the personal responsibility of the manager. The proposal is based on the idea that corporate decisions, by drawing in the enterprise work collective, should dominate on questions of general enterprise strategy, while in day-by-day management there should be opportunity for a more resolute and operative decision taking than is the case at present. No doubt, this system will create a structure of enterprise management that is more differentiated and complicated than the present one. I think, however, that after proper preparation these new forms of management will operate successfully.

In connection with the composition of the enterprise councils two ideas have come up in the course of preparatory work. One suggests that representatives of the workers should take part, and that the manager should have the right to appoint senior staff to the council according to definite rules. The excecutives of mass organizations would participate in the enterprise council as invited persons, thus ensuring their autonomy and independence in this manner as well.

The other idea was that one third of the members of the enterprise council should represent the workforce, one third would be the manager and his expert aids, and the remaining third would be appointed by the central state agencies–such as ministries or banks. Much can be said against this. We are of the opinion that the direct participation of state administrative bodies is not necessary in exercising rights of disposal ceded to the

enterprises. We cannot restrict the enterprise autonomy which we wish to expand by sending to the enterprises outside experts who are not familiar with the business of the enterprise. Furthermore, such arrangements would not clarify what interests would be represented by the outside experts and thus there would be much uncertainty in connection with their expected behaviour.

The most important argument in favour of the participation of outside experts is that the assertion of central, government viewpoints and the control of enterprise management could be secured through them. But the assertion of the central will can be adequately secured through the plan and the control instruments, while control can be carried out by supervision according to the law by the competent specialized agency. Thus, the inclusion of independent experts in the enterprise council does not appear to be necessary. This is also borne out by practical experience. If we dared to trust the agricultural cooperatives and the industrial cooperatives with the right of disposal over property and with employer rights *vis á vis* managers, and this caused no problems, then we may rightly trust that the managers and workers of state enterprises will also perform their tasks related to management with responsibility, correctly exploiting their increased independence.

The other newly proposed form of management–enterprises operating under an elected management–makes use of much favourable experience with Hungarian cooperatives. It is also important to see clearly that even in this case there is no question of transforming state property into group property, nor of a model of self-administration based on it and divorced from state control. The state property entrusted to the enterprise cannot be divided among the members of the collective in the case of these organizations either and in case the enterprise is wound up, the state disposes over the assets remaining after the settlement of debts and other claims.

We are of the opinion that with these new types of enterprise management the interest in guarding public property and in increasing it in the long run can be developed. The ownership-consciousness and behaviour of workers can be strengthened, and a new meaning can be given to the already forgotten slogan: "The factory is yours, you are building it for yourself!"* In this way it can also be attained in the long run that workers should be interested not only in current profits and earnings, but also in increasing the wealth of the enterprise, and in future enterprise policy, operations and facilities.

Ways similar to the new types of enterprise management are already current in several socialist countries. In the Soviet Union e.g. there was legislation in 1983 on the participation of working collectives in enterprise management. This decrees that workers' collectives and councils can be created for every enterprise organizational unit. In major enterprises assemblies of the workers' collective have to operate. In Romania and Poland workers participate in the management of state enterprises with similar rights and in corporate form. In Bulgaria they takingly say that the state is the owner, but the enterprise collective is the "boss".

*A popular slogan in Hungary in the years of reconstruction after the nationalization of industrial firms. (Ed. note.)

Some of the Hungarian enterprise managers do not as yet sympathize with the new forms of management. This is understandable to some degree, since the rights of the employer will be taken over by the collective or its representatives, thus hierarchical dependence will be replaced by democratic responsibility and the controlling activity of the enterprise collective will also be more direct. Their reservations are motivated, in my opinion, by their doubt that greater autonomy will be complemented by the necessary authority concerning finances, staffing, taking decisions and disposing over things in concrete cases. Furthermore they argue that even today there are too many professional, social policy and enterprise committees that take much of their time and energy. But the enterprise council will not be one of many, but one of the most important forums of enterprise control.

Do the new forms of enterprise management affect ownership? The answer should be clear from what has already been said: it is No. This decision does not split up property, but delegates some of the rights of disposal over property, and the rights of the employer are transferred to the authority of these bodies. There is some experience in Hungary in this field, too, since we do not start from scratch. There was a time when the state ceded a part of the rights of disposal over its property—in different ways depending on the economic organizations concerned—to the industrial directorates, to holding companies, to County Councils, to the National Centre of State Farms, to the National Forestry Authority or to mass organizations, e.g. to the National Council of Trades Unions. Experience has shown that divided rights of disposal over property did not entail irresponsible decisions. It is our conviction that if we widely mobilize the workers of large plants to exercise their rights, and if we do it well, we can only expect advantages, since the consciousness of being the "boss" on the part of the workers, and their responsibility for management, will strengthen.

In further reforming the economic mechanism it is a basic requirement that the ratio between social property and private property should not change essentially. The process of building socialism proves that the two basic forms of socialist ownership, state and cooperative property, can coexist, and forward looking, mutually exploitable experience strengthens both forms of ownership and inceases the efficiency of management. Promotion of the development of both, stimulation of their cooperation and relations may, in the long run, lead to nationwide communist ownership.

New forms of state and cooperative property have already developed in Hungary in the agro-industrial unions and in the joint organizations of industry and foreign trade. A new form of social ownership has come about also in the case of the Economic Associations. We wish to strengthen the role of the latter in the future as well in order to increase the income producing ability of the national economy.

Relying on practical experience, I should also like to point out that the majority of organizations that come about through the development of small-scale complementary economic activity, thus the small enterprises, the various cooperative specialized groups, as well as the units of productive or trading enterprises operating under contract or leasing, all function on the basis of social ownership.

The price system and the price mechanism

With the further development of the economic regulatory system the main objective is to increase, in harmony with the growing autonomy of enterprises, the interest of enterprises and individuals in better performance. To achieve this those effects of the present regulation which distort real value and restrict performance must be warded off. In this we wish to use, in their proper place, the regulated market mechanisms, and also competition between economic units.

Our principles related to the price system and the price mechanism are not new. The most important change in the price system occurred in 1980 when cost plus in the system of producer prices was replaced for industrial products which are subject to international trade by a price formation adjusted to export or import prices.

We have not yet succeeded in consistently attaining that producer and consumer prices should be proportional and that consumer prices should on the whole exceed the level of producer prices by 6–8 per cent, although on the average of the last 15 years consumer prices have risen by an annual 4.4 percent.*

It is invariably our endeavour to ensure that the basis of prices should be the socially necessary input. Practices have become current in prices policy that make it impossible for an excessive proportion of rejects, irresponsible management or excess losses to be built into prices. This is why for some commodities domestic producer prices that correspond to the international judgement of the market have to be asserted. For others no such international comparison is possible. In those areas prices based on costs corresponding to the socially necessary inputs have to be established, ensuring at the same time that other elements of the control system should enforce rational cost management.

In agriculture, as in other countries, a price system corresponding to special features has to operate which stimulates and establishes preferences in order that propensity to produce should be maintained and even stimulated. In the contrary case one may have an excellent price system in principle but no incentive to produce on the part of farmers.

We wish to eliminate from the price system as a whole–inclusive of consumer prices–all unjustified state subsidies, individually weighing the steps to be taken. At the same time, we do not give up strict central price control, we cannot give scope to spontaneous price rises. The price regulating instruments which help in shaping relative prices reflecting true value relations should also be used to this end.

*It must be born in mind that in socialist countries producer prices comprise taxes which are levied in Western countries on consumer prices. (Ed. note.)

Incentives

The regulation of earnings is a determinant element of the regulatory system. In this field a breakthrough must be effected in the immediate future. The aim is to remove those obstacles which prompt enterprises and workers to withhold their performance. Steps should be taken to ensure that the possibilities for wage rises are proportionate with productivity, that the role as incentives of incomes policy increases. As a first step regulations covering average wage rises in enterprises should be abolished already in the first step in all areas where economic competition and a proper sensitivity to prices and costs will stem an outflow of earnings disproportionate to performance. It must be ensured that wages rises depend directly on productivity and on profits, that is on enterprise decisions on the use of after-tax profits. In other fields more direct methods of wage regulation, setting limits to the growth in purchasing power, have to be maintained

The steps to be taken in the regulation of earnings are being prepared and founded by the experiments carried on since January 1st, 1983. It was then that two more flexible forms of wage regulation than the average wage control were introduced in 29 industrial and construction enterprises and cooperatives hoping that increased financial stimulation would prompt them to much higher productivity. This affected 100 thousand employed persons.

In 1984 the scope of participation in the experiment widened. A further 25, mainly industrial and construction, enterprises participate in the two forms of wage management mentioned. Thus, inclusive of those taking part in the previous year, there are now 54 enterprises in the experiment, employing 225 thousand people.

In 1984 a further flexible form of regulating earnings was also worked out and introduced, including 72 enterprises with a total workforce of 128 thousands. Thus the experiments affect already more than 350 thousand people.

The substance of these experimental forms of income regulation is to prompt enterprises to a more rational management of resources and a reduction of costs. The enterprises can use a greater part of the costs saved to raise wages than was the case earlier. Apart from a few exceptions, the experiences of 1983 bear out the soundness of the experiments.

In recent years several changes were made in the Hungarian regulations affecting enterprise income–first of all in view of equilibrium requirements. The most important were: abolition of the charge to be paid on engaged fixed and circulating assets, expansion of enterprise decision opportunities in respect of the use of profits remaining in the enterprise, first in the determination of its use for development and profit sharing, and later in contributing to a reserve fund.

Since in Hungary the costs of live labour, that is of wages and all that go with it, are undervalued relative to the costs of embodied labour*–even after the charges on assets were abolished–a repeated rise in the wage tax appeared to be justified. This could also

*Buildings, equipment and materials. (Ed. note.)

ensure that budget expenditures related to social insurance could be covered by levies proportionate to manpower.

It is a basic condition of offering incentives to management that the scope of movement of enterprises in using their incomes should grow. To attain this, the powerful financial discrimination against certain parts of income depending on the purpose of utilization, the existence of the much criticized "two or more kinds of forint"* has to be abolished. Incomes policy must avoid regrouping profit proportions based on actual performance. Economic units must receive a larger share than at present of the results of their additional performance.

A more rational management of resources demands a further raising of the enterprise costs and charges related to manpower. The charges and costs related to assets have to be transformed in a way to secure, even with autonomous enterprise management, proper harmony between the investment purchasing power and the investment goods available according to the plan. It is desirable that such requirements should be coupled with a reduction of profit and the profit tax, and not with a rise of the price level.

In those areas of production where economic competition cannot develop under regulated market conditions, as well as in a great part of the non-productive sphere, an incomes policy corresponding to the special features has to be applied. In agriculture and in auxiliary, complementary farming, and in household plots it is expedient to operate income control that deviates from the usual, taking into account the particular features of the field in the future as well.

The flow of assets (capital)

Nor do the proposals for accelerating the flow of capital amount to introducing completely new methods in Hungary. As a first step it became possible for enterprises to transfer assets free of charge, as a bookkeeping entry, while later the value processes were gradually strengthened also in the flow of capital. In its course the comprehensive 1978 regulation of Economic Associations first promoted the flow of enterprise development funds related to organizational changes. In the framework of associations the enterprises can establish joint enterprises, deposit associations, associations, and special R and D and production associations. Economic, foreign trading and R and D associations can also be established in the framework of associations which are not legal entities.

In 1981 the possibilities were further extended by the right to found affiliates. The free cession of fixed assets through appropriate bookkeeping entries was abolished, the restrictins on selling assets were eased and the leasing of machinery and equipment was no longer subject to restriction. All that was intended to promote a better exploitation of enterprise assets.

*The Hungarian currency unit. (Ed. note.)

Not only productive assets but also funds could move freely. Since 1979 there is an opportunity to cede temporarily development funds to other enterprises, that is, to extend credit from development resources.

Beginning with 1982 the Council of Ministers allowed and regulated the issue of, and subscription to, bonds. Experience to date and the great interest exhibited in bonds testify to the soundness of these measures and also that bonds promote the increase in enterprise savings, furthering the well considered investment of money, also making it possible that the savings of the general public be used for certain well chosen communal purposes.

To free the flow of capital it was also necessary to abolish regulations determining the production pattern of enterprises. E.g. the official approval of an association contract can only be refused if the contract conflicts with some legal regulation or infringes national economic interests. Since 1981 enterprises have been generally permitted to carry on complementary activities which do not belong to the scope of activity outlined in the foundation document, but promote efficient functioning. The scope of activity of affiliates can be established independent of the founding firm.

The 1982 modification of the Act on cooperatives promoted flexible enterprise management also in the cooperative sector by establishing that a cooperative may carry on every kind of legal activity, which is not reserved for state economic units.

We thus have legal norms securing an adequate scope of movement for enterprises and yet we have not made fast progress. It is typical of the present mechanism and the forms of the flow of capital that the budget taxes away a part of the income of successfully managed enterprises and reallocates it. In view of the fact that much of this money serves the maintenance of uneconomical enterprises, or those running into losses, this impairs the efficiency of the economy and hinders the desirable transformation of the economic structure as well as the improvement of the adaptivity of the economy. It is true that these government measures provide an opportunity for a more profitable use of assets, for their increased flow, but the results attained are still slight. This is also shown by the fact that within the more moderate investment opportunities of recent years the transfer of development funds does not amount to more than Ft 6–7 billion p.a., and even within that the profit-motivated regrouping of resources for productive purposes is particularly low. These facts call attention to the necessity of further changes all the more so since the legal conditions of regrouping assets (capital) have been established.

Our main task in this field is to give more and more economic punch to what the law makes possible, first of all by bringing about mutual interestedness. Lacking additional resources those that exist must be made to flow from the less efficient areas to those with better prospects. Instruments and new forms of movement to achieve this have to be promoted.

In recent years a new feature of banking has been that various development institutes, funds, associations have come about which finance, mainly in the form of credit, some primarily quickly paying-off investment projects and technological development actions. The resources of these institutions are determined when they are founded,

but they must not engage in the usual banking business, e.g. they do not accept deposits.

As part of the modernization of the banking system the functions of the bank of issue have to be separated in the near future from the organization looking after credits. The various departments of the National Bank of Hungary concerned with credits have to be vested with a greater, independent authority to grant them than at present. In addition, also the number and activity of crediting organizations outside the National Bank of Hungary, thus of smaller financial institutions and various funds may expand, in order that, at least partially, a relationship free of sectoral restrictions and based on business interests may develop between the economic units and the financing institutions.

Further improvement of the system of economic control and management is in the interest of the whole of Hungarian society

We are thoroughly familiar with our economic situation. We may have believed for some time that troubles would pass and the economy would return to its old path, but today we know that such is the stuff that pipe dreams are made of. Having experienced the events of recent years we must be aware that if we do not find the new means and methods for improving the value creating ability of the economy, nor only stagnation but even a relapse to low standards of growth threaten. We may find ourselves in a situation where the main objectives of economic policy will have to be formulated even more modestly than at present and the further course of the economy would be increasingly determined by coercion instead of free choice. This would rapidly deteriorate the standards of the domestic supply with commodities, keep down living standards, endanger the political stability at home and even impair the country's international standing.

We wish to avert this danger by continuing to reform the system of economic control and management. It is usual to ask nowadays: how do we know that we can attain our objectives with the chosen methods and instruments? There are no guarantees, but competent and consistent work will produce them.

What has happened since the 1966 resolution of the CC on the mechanism proves that the bringing about of equilibrium between supply and demand requires some longer period–even in a given section of the economy. In a stage of development when we set for objective the general realization of economic equilibrium, it is increasingly important to plan not only the direction of development of the system of instruments but also the time schedule of its introduction.

Beside the expected and hoped for positive effects negative consequences have to be reckoned with as well. To a certain extent this is only natural, since there exists no therapy, no medicine without side effects. But, examining the social impacts we have to be aware that a longer time is needed for the evolution of favourable effects expected from further development, in the short run rather unfavourable side-effects possibly

appear with the majority of cases. Let us bear in mind the emergence and development of household-plot production.

It can be expected that public opinion will also react to some phenomena with negative feelings, since their useful aspects will only emerge in the longer run. Some people—particularly those affected—consider even the abolishing of unjustified protection and privileges as the abandonment of social achievements.

The much advocated idea of social equality is deeply rooted in public opinion. Hungarians acknowledge in principle that it is right for labour performances to be reflected in wages and earnings but they tolerate considerable differences with difficulty. They consider the present differences in income and wealth to be unjust, frequently even if they are based on differences in performance.

It follows that the general public will presumably accept also the differentiating effects accompanying the continuing reform of the system of economic control and management with difficulty. Greater differentiation in the efficiency of enterprises, in the level of personal incomes and thus coming to expression in the position of workers at any particular time might involve conflicts. We have to be prepared to handle them, securing adequate means well in advance.

In this context a few words should be said about full employment. There can be no doubt that this is one or our most attractive socialist values, yet the debate about it is at its height in Hungary. There are people who fear that we are carrying the reform of the system of economic control and management to such a point that we finally endanger full employment, while others contemplate whether *some* unemployment might not help to increase efficiency. We cannot agree with such views. At the same time, it is an important and significant task to resolve the contradiction between full and effective employment. According to our ideological opponents the price of the important achievement of socialism, of full employment, is the abandonment of efficiency. It is true that up to now we have not succeeded in completely coping with this task, but this does not mean that we have abandoned the endeavour to do so.

Full employment has to be guaranteed in the future as well, and this is the duty of the socialist state, while efficient employment is the duty of enterprises. The practical implementation of these principles may in some cases entail that a job might not be guaranteed where the worker would like to have it, and may be the job offered will not be in conformity with a man's qualifications.

The rises in consumer prices in recent years have put the understanding and tolerance of the general public sufficiently to the test. Theoretically, it is clear that rises in consumer prices of the coming years are not consequences of the further reform of the system of economic control and management. In the minds of a great part of people, however, they will presumably be linked. Therefore, steps to be taken must be antiinflationary, defending our achievements and providing foundations for future development. This has to be emphasized all the more as in the present economic situation there are considerable forces at work which boost prices. Suffice it to refer to the foreign trade price losses continuing to grow regularly, and to the unsatisfactory progress of

efficiency, as well as to the necessity of stimulation through increases in nominal wages. In this question, too, a compromise has to be found between the tolerance of society and economic rationality.

In this context, I wish to mention that the contraventions and crimes in almost every field of social and economic life, the negative phenomena destructive of public morality, understandably irritate the public much more than earlier. These are related first of all to laxities, the deficiencies of regulations and of control, the weaknesses of leadership and, not least, to shortages.

Some people see these unfavourable tendencies as consequences of the ending of earlier direct control methods, and of the appearance of new forms of organization. But domestic and foreign experience equally proves that such and similar distortions and contraventions do not follow from that but from the weaknesses of management and of public morality; the neglect of rules determining social behaviour, and gaps in the latter. It must be avoided that measures aimed at suppressing the negative phenomena of the economic life restrict initiative and enterprise, efficient and rational management, or incomes proportional to socially useful performance. It is precisely the operation of management and control that strengthens relations between plan and market that is a basic condition of overcoming damaging phenomena. This has to lead to the abolition of unjustified privileges and monopolistic positions and to a consolidation of moral norms. It is our conviction that further reforms will make this fight even more successful, because a more effective control reduces the shortages and thus the inherent opportunities for abuse.

With the proposed further developments—as could be experienced also over the past fifteen years or more—the political mechanism of socialist society may make further progress. A better delimitation of tasks is coming about between the Party, the state, the trades unions and other bodies representing various interests, as well as between the economic control agencies and enterprises.

The role of the Party will grow in the shaping of economic policy, in making it accepted and in controlling its implementation. The economic organizing activity of the state and the government will also move forward. There will be opportunity for modernizing the working style of the Party as well. I am of the opinion that it has become clear from what has been said and from the stand taken by the CC that the Party does not "withdraw from" the economy; on the contrary, its responsibility is growing for a better correspondence between economic policy guidelines and practice and the socialist norms of society as well as changing requirements. With growing enterprise autonomy government control will maintain its ability for action, and can promote the implementation of economic policy with the aid of effective control instruments, basically using indirect instruments when shaping the economic environment, but in case of need it can assert its will also with other methods.

Advantageous conditions have developed for further progress in socialist democracy as well. The dependence of enterprises on control agencies is diminishing, and the democratic forums of enterprise management are also growing in number. These bodies

obtain effective scope of authority and, through the elected competent representatives, the ownership-consciousness of the enterprise collective, their interestedness in and influence on management will increase. The autonomy of local government councils will grow. The local and regional councils will get greater financial opportunities to strengthen their self-government features. The financial interest of people in exhibiting greater interest in local affairs will grow.

The mechanism to be developed for the reconciliation of interests creates opportunities for the expression and assertion also of such interests which have not had any representation or forum up to now. In this manner the forums for the reconciliation of interests may become new forums of democracy. This may expand the duties of the trades unions, the cooperative representative bodies and of the Chamber of Commerce.

Management of an entrepreneurial type will obtain greater autonomy. The scope of posts to be filled by competitions and election will expand. Through this the chances of subjectivism, of unprincipled nepotism will diminish in personnel questions.

Creative work, the taking of responsibility and outstanding performance will get greater social acknowledgement, financial and moral appreciation. All that will improve public morale, creating the bases for a richer life for the masses, also by the strengthening of public integrity, order, discipline, in the last resort of the socialist features of society.

The course of further development

The proposed changes should be implemented by the end of the 7th five-year plan period (1986–1990). There is an opportunity to make a concentrated move in 1985 in the further reform of the system of economic control and management. Our aim is to implement the greater part of the substantial changes already before the start of the 7th five-year plan, so that the enterprises may reckon with their impact when drafting their medium-term plans.

One of the fields where steps are planned for 1985 includes the beginning of the implementation of the proposals related to the system of regulators, the other that of changes in enterprise management and in the institutional system. The changes in the control system require particular coordination in regard to both the individual elements and the extent to which certain measures are applied. The new system of wage regulation will be introduced, enterprise taxation will change, further steps will be made towards improving the price system, the interest-mechanism will be updated and steps will be taken towards a more uniform system of turnover (sales) tax.

Transformation of the banking system and the introduction of new forms of enterprise management will start and, in harmony with these, the supervisory activity of ministries over enterprises will change and the modernization of enterprise organization will continue. It is at the same time obvious that the necessary modification of the organizational structure cannot be completed in a single year. Thus the programme

started has to continue also in the period of the 7th five-year plan, which will constitute an organic part in the consolidation of the regulated market relations.

The proposals also comprise elements in which progress can only be made from one year to the next. Such is e.g. the realization of a price system better reflecting market relations, in which progress can be made only in harmony with actual demand and supply. Other proposals can only be implemented in the years after 1985; they include e.g. the introduction of the general taxation of personal incomes, a corresponding transformation of the wage system, and the development of the system of social policy instruments.

The taking of risks is unavoidable in work of such a type. Even methods still reckoned to be novel have to be undertaken since, if they are well applied, they may promote progress and meet with the approval of our people and the public.

The forthcoming reform of the system of economic control and management satisfies these requirements and promises at the same time a great impetus for creative people who do not shrink from new and demanding tasks and are of an enterprising spirit. Wider scope is provided for useful activities. With the implementation of the indicated tasks economic and institutional constraints will be eased. They had put a brake on development being obsolete and rigid elements of economic control, and had hindered a fuller evolution of intensive development.

Relying on experience we may justly expect that the whole Hungarian working population fully feels the importance of further progress concerning the system of economic control and management, approves of the main direction of further steps, and actively supports its implementation. It will serve, even under the ever more difficult conditions, as a sound instrument in work aimed at providing the foundations for growing welfare.

ДАЛЬНЕЙШЕЕ РАЗВИТИЕ СИСТЕМЫ УПРАВЛЕНИЯ ЭКОНОМИКОЙ В ВЕНГРИИ

Ф. ХАВАШИ

Центральный Комитет Венгерской социалистической рабочей партии на своем пленуме в апреле 1984 г. принял решение о дальнейшем развитии действующей системы управления экономикой. Автор статьи, член Политбюро, секретарь ЦК ВСРП, на основе этого решения анализирует существующее положение и направления дальнейшего развития.

Одно из важных направлений — это повышение эффективности централизованного управления. Централизованное управление должно покончить с наследием экстенсивного периода развития — количественным подходом и поставить в центр работы эффективность и качество. Планирование должно лучше и более глубоко заниматься процессами способствующими производству национального дохода в народном хозяйстве, проведением селективной политики развития, свертыванием неэффективных деятельностей, качественной стороной капитального строительства, созданием и поддержанием народно-хозяйственного равновесия. Расширение общественного характера плани-

рования, рост децентрализации и самостоятельности предприятий позволяют, чтобы планирование из учетчика производства и распределителя ресурсов превратилось в орудие формирования образования доходов, обеспечения гибкости экономики и формирования социальных процессов, вскрытия многосторонних общественных интересов, стало их главным согласователем. Социалистическое государство и в будущем будет твердо держать в руках и регулировать социалистическое товарное производство на основе народнохозяйственных планов — с помощью средств финансовой и бюджетной политики, посредством банковской системы, в рамках надзора над рынком.

Другое важное направление — это усиление самостоятельности предприятий и формирование такого поведения предприятия, которое носит предпринимательский характер. Планируемые меры в основном затрагивают формы государственной собственности, и, в частности, формы функционирования промышленности. Права государства как собственника в отношении государственных предприятий до сих пор в основном осуществляли органы государственного управления (отраслевые министерства). И в будущем министерства будут продолжать выполнять функции надзора над предприятиями, однако отдельные права по распоряжению собственностью и права работодателя по отношению к руководителям предприятий будут переданы самим предприятиям. Это произойдет тремя способами. На предприятиях сферы коммунальных услуг, а также на тех, которые будут включены в эту группу правительством по каким-либо другим основаниям, осуществление прав собственника не изменится (останется в компетенции государственного управления). Новую форму управления предприятиями представляет предлагаемый для руководства средними и крупными предприятиями совет предприятия, который будет состоять частично из представителей работников предприятия, а частично — из ближайших сотрудников директора. Цель состоит в том, чтобы по общим вопросам стратегии предприятия решения принимались этим органом, а в вопросах текущего руководства более четко проявлялась бы единоначальная ответственность директора. Руководители предприятий назначаются на определенный срок, а отбор их должен происходить по конкурсу. Также новую форму руководства, прежде всего небольшими по числу работников предприятиями, будет представлять выборное руководство, в чем будет использован положительный опыт работы венгерских кооперативов. Однако в этом случае речь идет не о передаче государственной собственности в групповую собственность, так как переданная в пользование предприятию государственная собственность и на этих предприятиях не может делиться между членами коллектива, а в случае ликвидации предприятия оставшейся после расчетов с кредиторами и дебиторами собственностью располагает государство.

Третье направление — создание такой системы институции по перегруппировке средств, которая обеспечила бы как эффективность государственного управления, так и хозяйственной деятельности предприятий. Автор подробно знакомит с планируемыми изменениями в системе ценообразования и регулирования доходов. Особо останавливается он на важности перелива средств между предприятиями и знакомит с уже принятыми мерами и планируемыми изменениями в целях высвобождения средств. Цель состоит в том, чтобы имеющиеся средства переливались бы из менее эффективных областей на перспективно более рентабельные участки народного хозяйства.

Предлагаемые изменения осуществлимы до конца 7-ий пятилетки (1986—1990 гг.), однако уже в 1985 г. следует предпринять концентрированные шаги для того, чтобы предприятиям были известны существенные изменения, и они считались бы с ними уже в ходе составления своих пятилетних планов.

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SOFTNESS OF THE BUDGET CONSTRAINT – AN ANALYSIS RELYING ON DATA OF FIRMS

J. KORNAI – Á. MATITS

In the article first of all the notion of "hardness" or "softness" of the enterprise budget constraint is discussed, then the statistical examination is presented, made by the authors together with several co-workers, aimed at the processing of financial data of Hungarian state enterprises between 1975 and 1980. One of the major goals of the examination was to compare theoretical hypotheses referring to the softness of the budget constraint with experience.

1. The central redistribution of the income of state enterprises is of a very large extent. As a result the actual profitability in reality is deviating from the "original profitability". (In the study hypothetical profitability "purified" from the last phase of redistribution directly affecting the enterprise, i.e. computed without subsidies and levies is called so.) 2. The effect of radistribution within the industry is much stronger than within agriculture. 3. Losing enterprises are paying out profit shares, too. No unambiguous, monotonously increasing correlation may be observed between profit share, on the one hand, and original and actual profitability, on the other. 4. By means of redistribution a levelling off of profits and profitability is taking place. 5. The survival of enterprises is almost guaranteed. The liquidation or amalgamation of an enterprise do not depend either on the original or the actual profitability of previous years. The authors drew the general conclusion that the budget constraint of state enterprises is soft. There were no visible signs of "hardening" of this constraint even in 1980.

In his book "Economics of shortage"* János *Kornai*–one of the authors of the present article–asserts that the budget constraint of state-owned firms is "soft" in the socialist economy. Relying on a statistical analysis of the financial data of Hungarian state-owned firms, this article is an attempt to test the validity of the hypotheses on the softness of the budget constraint.

What does softness of the budget constraint mean?

We shall sum up briefly, what is meant by hardness and softness of the budget constraint. Also, we shall use this opportunity to clear up certain misunderstandings on the interpretation of this concept.

The firm earns proceeds by selling its output. Its budget constraint is hard if it has to cover its expenses ultimately from these proceeds. If it incurs losses and has used up all its money stock to cover these losses, it will sooner or later go bankrupt. The investment

*See [4] Chapter 13, and as a summary, the article [5] published in Acta Oeconomica.

activity of the firm is thoroughly dependent on the profitability of its past activities and on the profit it expects to earn in the future. For these reasons, it is not only financially and morally interested in the profit, but profit is a *question of life and death* for it; it depends on profit whether the firm survives, and if it does, whether it will grow.

The fact of a hard budget constraint is compatible with the firm's paying tax to the state, provided that the tax regulations and fulfilment of the tax payment obligation are not subject to bargaining between authorities and firms.

Further, the fact of a hard budget constraint is compatible with the firm's taking up credit from a bank or from another firm, or obtaining additional financial resources in any other way. It is self-evident that credits are entered on the receipt side of the financial balance sheet together with the proceeds from sales, while amortization and interests paid on credits are entered on the cost side together with the production and administration expenses. But, *ultimately* (the word stressed is to be found in the definition of the hard budget constraint), it is not possible to live continuously on credits. If the firm's debts are growing at a faster rate than its proceeds from sales, and if its payment difficulties become increasingly frequent and ever graver, this will undermine the firm's creditworthiness. Financial failure comes when the firm is unable to fulfil its current obligations of amortization and interest payment, or it becomes insolvent, and the creditors are not prepared to tolerate it any longer. The hard budget constraint of the firm, the strictness of the credit system, the risk of bankruptcy, the feeling of threat to the permanently loss-making firm are all closely interdependent phenomena, conditional on one another.

The "softening" of the firm's budget constraint may take place as a consequence of four different processes, each one able to take its course alone, but also existing linked together.

1. The firm receives state subsidies in compensation for losses or rising costs. This may be occasional or regular; it may be attached to a certain product or to the whole activity of the firm (or group of firms).

2. The firm is granted tax exemption in compensation for losses of rises in costs. Perhaps the prescriptions are from the outset "made to measure". Or it is subsequently that exemptions are made, and due liabilities postponed.

3. The credit system is "soft". This is not reflected in the rate of interest, but in the actually prevailing (not just declared) rules of the game of granting loans. One important measure: upon which principles does selection take place in practice? Are those firms given preference, which promise to be the most profitable? Or, on the contrary, those which are in trouble and need the help of the bank? Another measure of the hardness or softness of the credit system is how much the bank insists on enforcing the conditions of the credit contract? Is it indulgent with those who are unable to fulfil their payment obligations of amortization and interest?

4. State authorities prescribe some of the prices, or they set an upper limit to price rises. It has a "softening" effect if it is not the firm that has to adjust its costs to the exogenously given price, but the other way round, it is the state price authority that

adjusts the price to current costs. From this point of view, it does not matter whether this adjustment is made openly or in the form of a disguised price increase. The point in question is that the firm shifts its losses and rising costs onto the buyer–with the state price authority's approval.

It follows from the preceding that the "softness or hardness" of the budget constraint cannot be described for each firm separately by examining the momentary financial position of the firm in question. It is entirely beside the point to say that the budget constraint of firm "A" was soft in 1978, and that of firm "B" was hard in 1980. "Hardness or softness" of the budget constraint is a metaphoric expression referring to a definite *behavioural pattern.* This behaviour does not develop separately, on the basis of a firm's fresh individual experiences, but is shaped and takes root through a *long-lasting mass experience.* The most important element in it is the *expectation* regarding the consequences of earning a profit or making a loss–a kind of subjective probability estimation of the risks entailed by loss and the advantages by profit. The more the firm can expect that its survival and growth depend on this (as well as on luck on the market), the harder the budget constraint. And, conversely, the more it can expect that profit or loss will play a relatively little part in its survival and growth, since the latter depend more on what the state gives it or takes away from it–the softer the budget constraint will become.

From the preceding it follows as well, that the reason why the firm's budget constraint softens is not only that the state helps the "weak" out of their trouble, but also that it "skims off" the outstanding profit of the "strong"; it may wind up profitable firms or merge them into less profitable ones. Loss is not a catastrophe, nor is profit a big luck.

A short description of the analysis

The present article is based on the first partial results of a long research.*

In the course of the research work, we feed into the computer a great many data** of the balance sheet report of all the *state-owned firms.* From these elementary data a

*The research work is undertaken on commission by the Ministry of Industry; its preparatory phase was accomplished under the auspices of the State Development Bank of Hungary. The research work is directed by *János Kornai:* his colleagues in the present phase are: Anna *Ferge,* Miklós *Locsmándi* and Ágnes *Matits.* In the former phase Andrea *Deák,* Mária *Fényszarussy-Simek,* Klára *Sztachó* and Péter *Wellisch* cooperated.

The first results of the research work were summed up in a mimeographed report under the title: *Az állami vállalatok jövedelmének redisztribúciója–Első beszámoló* (Redistribution of the income of state-owned firms–First report) (November 1982 – March 1983). Most of the material of the present article is borrowed from this; the Report contains, however, a lot more computational results and a more detailed analysis. In the following, reference will be made to this more detailed report under the title "First report" [6].

We owe thanks to the other contributors of the research work, as well as to those who helped processing the material with their valuable comments, among others Mária *Csanádi,* László *Gálik,* István *Hetényi,* Mihály *Kupa* and Erzsébet *Szalai.*

**The dimensions of this enterprise are illustrated by a few data as follows: for example, in 1980

homogenous system of indicators comparable in time and in cross section was composed. For the purpose of our economic analyses, 49 special aggregates were formed; these are called *absolute indicators.* From some of the absolute data altogether 28 quotient indicators were formed, and these are called *relative indicators.* Thus our own system of indicators* consists of 77 indicators for each firm and for each year. In the phase of the research work that has just been finished, data have been compiled for the six years from 1975 to 1980.

We consider the confrontation of economic theory with experience as the main objective of the research work. One of the characteristic features of our undertaking is that, while handling millions of data, we wish to make basically qualitative statements. Though we do not discard the idea that other researchers may work out an econometric model for quantitative prediction, we wish to make it clear that within the framework of the present research work we do not undertake it.

Our target, which is to set forth qualitative statements with the aid of numbers, raises various methodological problems. These problems are not unknown in the international literature, especially if we go beyond economic theory and use the results of science theory and methodology achieved in other disciplines. Nor is the problem entirely new in the Hungarian economic literature.** That much is certain, however, that relatively little research has been made in Hungary in this direction. Therefore, we consider it as an important task to make a step forward also from the methodological aspect in testing qualitative economic hypotheses using mathematical-statistical methods.

In this article we shall not dwell on each objective of the research work. As it has been indicated, we are now only concerned with the confrontation of a few hypotheses on the firm's budget constraint with the Hungarian experience.

The indicators

We do not wish to go into the details of the entire system of indicators. It seems, however, necessary to sum up and explain the most important indicators referred to in the article. They are the following:***

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we selected 113 balance sheet data. In that year 1636 state-owned firms were working, thus we used, for that one year 190 thousand elementary data–such as were directly taken from the balance sheet report.

*A detailed description and demonstration of this system of indicators is given in the Appendix of the "First report" [6].

**See for example [9].

***The serial numbers are identical with those used in the "First report" [6]. The logical sequence of the discussion demands that we deviate from the sequence of the numbers. In our tables and analyses the serial numbers of the relative indicators are bold, so as to distinguish them from the serial numbers of the absolute indicators set in normal type.

1. Original profit
1. Original profitability
2. Profit left after general taxes and subsidies
2. Profitability after general taxes and subsidies
3. Profit according to the balance-sheet
3. Profitability according to the balance-sheet
4. Profit after redistribution
4. Profitability after redistribution
32. Rate of return of resources
11. Redistribution ratio
8. Investment activity

In our analyses a central role is given to the various profit indicators, as well as to the profitability indicators composed from the former. Let us now consider in turn the meaning of indicators 1–4 and 1–4

Let us assume–in a mental experiment–that in a given year the state decides not to effectuate any income redistribution. That is to say, in that given year, when all the proceeds and expenses of the firm have been accounted at current prices, no income would be taxed away and the firm would be given back the amount of its payments made during the year. Parallel with this, the state would not give the firm any money under any title and would make it repay the subsidies given during the year, as well as the amounts corresponding to the exemptions. This hypothetical amount is called *original profit* (indicator 1).

As a matter of fact, indicator 1 does not eliminate all the effects of redistribution. In the present phase of our examinations the "full" and "cumulated" tax content and subsidy content–taking into account also former computations–embodies in the costs of products and in the proceeds have not yet been computed. (The attributes "full" or "cumulated" are used in the preceding sentence in the same sense as when we speak about the full, secondary etc. labour input or about the full foreign exchange content, etc. compiled with the aid of the inverse of the Leontief tables.) No hypothetical price system free from state redistribution has been constructed so as to use it to compute again the production costs. In composing indicator 1, redistribution was "rendered undone" in the last stage, at the producer firm only.

It is stressed that we do not pass any positive value judgement on the original profit; we do not suggest that this is the "genuine" indicator, truly reflecting economic efficiency. The question cannot even be raised as long as the prevailing price system is accepted as it is, with all its well known shortcomings. We do not consider it a subject of our examination, what the mutual relations between profit accounted in money, profitability, and economic efficiency of production are. We shall revert to the problem at the end of the article.

Indicator 2 differs from indicator 1 in that the *general* taxes have been deducted from and the *general* subsidies have been added to it. Indicator 3 reflects further taxes and subsidies "addressed" to the sector of the firm; this is the "official" result: the *profit*

according to the balance-sheet. But redistribution goes even further than that, and this leads to indicator 4.

Obviously, the above description does not reflect a real chronological order. We do not assert that in practice first indicator 1 is formed, and is followed in time by indicator 2 and so on. This is only a logical "sequence". Indicator 1 is a "virgin" profit not affected yet by redistribution, and it will develop through a series of steps, separable only on an abstract level, into profit 3 and 4.* Since the latter are included in the customary financial accounts, they will be called "actual" profit.

In our analysis, therefore, three stages (1→2, 2→3, 3→4) of redistribution are distinguished. A study made in the Ministry of Finances** in 1982 lists 228 different redistributive elements which affect the formation, distribution, or utilisation of profit. It is illuminating to study the redistribution down to the smallest details. Yet we have deliberately adopted a more aggregate approach, in order to arrive at conculsions of a comprehensive character. We have refrained from taking into consideration, one by one, the title to and "ideologies" of the various redistributive measures, because we have sought answer to the question what their *joint* effect on the *totality* of the firms is, upon whichever consideration they may be applied.

The relative indicators **1**, **2**, **3** and **4** are the quotients of the corresponding absolute indicators and of the total value of assets (indicator 48). These indicators can be considered categories similar to the "profit rate".

The fifth profitability indicator applied is the rate of return of "resources". This indicator is a fraction, the numerator of which represents the profit according to the balance-sheet, and the denominator the value of total assets plus the annual wage bill. (This sum is called in the jargon of Hungarian accounting the value of "resources". As regards its economic content, this indicator is near to the usual "profitability" categories used in Hungarian business calculations.

The indicator **11** of the ratio of redistribution has been used to describe the extent of redistribution. Its contents is profit left after redistribution less original profit, divided by the value of the total resources.*** If there is no redistribution, the value of indicator **11** is zero; if more is taxed away from the firm than what is granted, the value of the indicator is negative; if the case is the reverse, its value is positive. The larger the absolute value of the indicator, the larger also the difference between the original and the actual profit, in other words, the greater the effect of redistribution.

*As for obtaining the data, once again we could not start from indicator 1. The starting-point of our data processing activity is the customary profit category, which is no. 3 in our system of indicators. From there we proceeded "backwards" in the logical sense: we "gave back" the firm all the different taxes, and "took away" subsidies, so that finally we arrived at the original profit.

**See [10]

***As it follows from the definition, the redistribution ratio **11** = profitability after redistribution **4** less original profitability **1**.

The quotient of the value of investment expenditure during the given year, and of the value of assets is called *investment activity;* in our system of indicators it is given the serial number 8. This ratio is an approximate indication of the relationship in the given year between "capital growth" and "capital".

We are aware that our system of indicators is debatable from several aspects; we do consider to construct further indicators for future investigations.

In the subsequent part of the article we shall set forth six hypotheses which we deem fundamental for our present subject.* Also, some of the computations for testing the hypotheses will be presented.

Large-scale redistribution, the original and the actual profit break away from each other

*HYPOTHESIS 1. The central redistribution of the state-owned firms' income is of a very high rate. Under its impact, the profitability actually asserting itself** breaks away from the original profitability.*

Our system of indicators allowed a many-sided empirical testing of the hypothesis. We can say that our computations clearly confirm it.*** For illustration, we shall review a few results.

In *Table 1* the redistribution ratios of a few economic sectors are presented, in the first and last two years of the period under examination. Among the major economic sectors it is exclusively in agriculture that the redistribution ratio is low, very near to zero, while in the other sectors it is very high. The value of the redistribution ratio may be qualified as high, if its absolute value is bigger than the average order of magnitude of the profitability indicators. In that case, namely, the profitability deflecting effect of redistribution is already over 100 percent. For comparison, we gave the average values of the original profitability **1** for the years in question, relying on *Table 1.* Even with the joint distorting effect of the average computation and the aggregation, the values of the redistribution ratio, that is, the extent of redistribution may be qualified as considerable.

*The "First report" [6] contains altogether 34 hypotheses, among them such that want further checking or correction.

**In the following we shall use the name "actual profitability" as a collective term when making joint qualitative statements on indicators 3 and 4. In a similar sense, whe shall also "actual profit" as a collective term to refer jointly to the absolute profit indicators 3 and 4.

***As early as during the preparation of the 1968 reform, some worry was expressed because of the generally high ratio of redistribution, and particularly that of subsidies. (See Andrea Deák's article published in 1968. [3]).

Table 1
Redistribution ratio
percent

Sector*	1975	1976	1979	1980
Industry	–7.34	–6.10	–5.77	–7.17
Building industry	–8.95	–7.61	–13.41	–5.72
Agriculture and forestry	0.01	–0.41	–0.62	–0.25
Transport and communications	–0.45	0.76	0.61	4.06
Trade	–17.06	–8.30	–12.29	–12.02
Health and cultural services	7.74	0.51	5.73	8.50
ECONOMY-WIDE TOTAL	–5.36	–3.76	–3.58	–3.39
Original profitability indicator 1 Economy-wide total	7.64	6.34	5.68	5.15

*For brevity's sake, the data of a few smaller sectors are not presented.

In the course of the computations also the quotient of total subsidies received by the firms and of their original profit was determined. On the basis of the 1980 data the result is 1.09. Thus, the figures show that if the firms had only received subsidies and nothing had been taxed away from them, their profit would have doubled. On the opposite side the quotient of total taxes and of the original profit is 1.28. These figures also show the high rate of redistribution; the mass of income "moved"–allocated plus taxed away–amounts to about the double of the original profit.

Finally, a third computation is presented. The correlation coefficients between the indicator **1**, original profitability and the indicator **4**, profitability after redistribution have been computed. Taking into account all the state-owned firms of the national economy, the value of the coefficient was very low: in 1978 it was 0.23, in 1979 0.22, and in 1980 0.22. In industry, the correlation is even smaller in 1978 0.12, in 1979 0.07, and in 1980 only 0.01. This is also reflective of the breaking away of profitability after redistribution from the original distribution.

Of course, behind the low correlation coefficients there may be many kinds of actual interrelations between the variables examined. At this point, however, we sought answer only to the following question: does a tendency exist according to which, if the original profitability of a firm is higher than that of another firm, its actual profitability will be proportionally higher as well? If there existed such tendency, it would be

manifest in a correlation coefficient of a high value, which would also be a kind of refutal of our hypothesis. Relying on our computations we can say that in regard of the total number of firms no such tendency shows: there is no parallel movement between the original and the actual profitability.

To reveral the actual relationship between the two variables determination of empirical regressions is a useful help. For an illustration, we present *Fig. 1* computed for all the state-owned firms of the Hungarian national economy, which shows the average actual profitability **4** belonging to each value of the original profitability **1**. It is to be seen from the figure that for the loose connections between indicators **1** and **4** those redistributive effects are responsible which assert themselves with firms that are

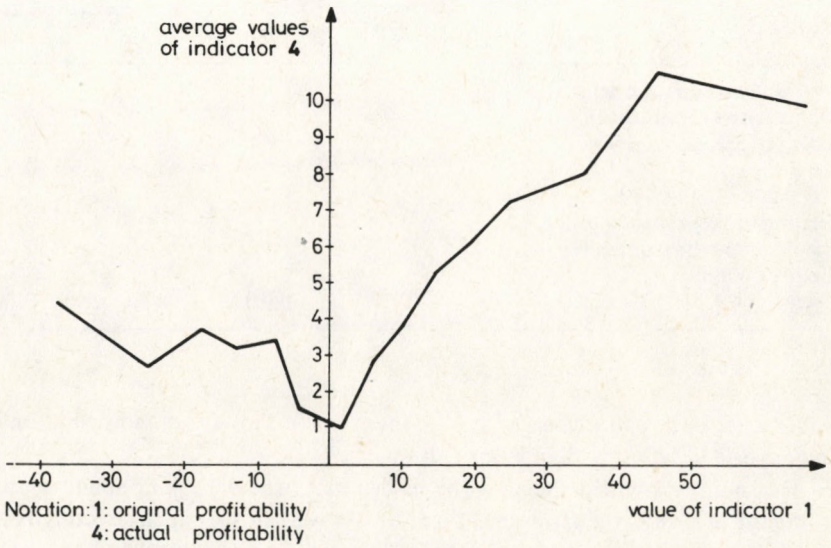


Fig. 1

Empirical regression function between the original and the actual profitability. Economy-wide total, 1980

loss-making according to the original profitability, or, on the contrary, with those *earning extremely high profits.* It is clear that there is no unambiguous correlation between the variables under examination. (It is to be noted that the regression curves determined at lower aggregation levels were similar.) The phenomenon conspicuous already in Fig. 1 points to a subsequent theme: the problem of levelling.

HYPOTHESIS 2. The redistributive effect is much stronger in industry than in agriculture.

Of the many kinds of tests we shall present only two. One is *Table 2*, demonstrating that while in industry the linear correlation between the original and the actual profitability is very loose, in agriculture it is rather close.

Table 2

Correlation coefficients between profitability indicators

	Industry		Agriculture	
	1979	1980	1979	1980
Correlation between the original profitability and the profitability according to the balance-sheet, i.e. between 1 and 3	0.29	0.28	0.88	0.76
Correlation between the original profitability and the profitability after redistribution, i. e. between 1 and 4	0.07	–0.01	0.86	0.73

Table 1 given in connection with hypothesis 1 also shows that redistribution is of a much larger scale in industry than in agriculture.

At this point we wish to remind the reader that, when speaking about agriculture, what is meant is always the *state-owned* sector. As we can see, in this sector the profit motive is more consistently asserted even in the state-owned sector, and the inter-firm redistribution has less effect on the development of profitability, than in the industry and several other sectors. A further factor in this may be that while in industry the dominant sector is made up of the group of state-owned firms, in agriculture the situation is different. In agriculture even the state-owned firms' behaviour and also central actions concerned with the state-owned firms conform to some extent to the circumstances of the dominant sectors: the cooperatives, the household-plots and auxiliary private farms. And in the non-state sector a profit-oriented behaviour is dominant.

Levelling

Which are the criteria by which redistribution takes place? Is there any permanent bias present in the redistribution among firms? Several hypotheses have been suggested in regard of these questions in the Hungarian literature.* Most of these say that a firm has more chance to enjoy a preference if a) it is in a "preferred (priority) sector", b) it is a big firm, c) it is one of the 45 or 50 big firms specially selected for extra attention by the superior authorities in the early 1970s, d) the firm has good connections with the

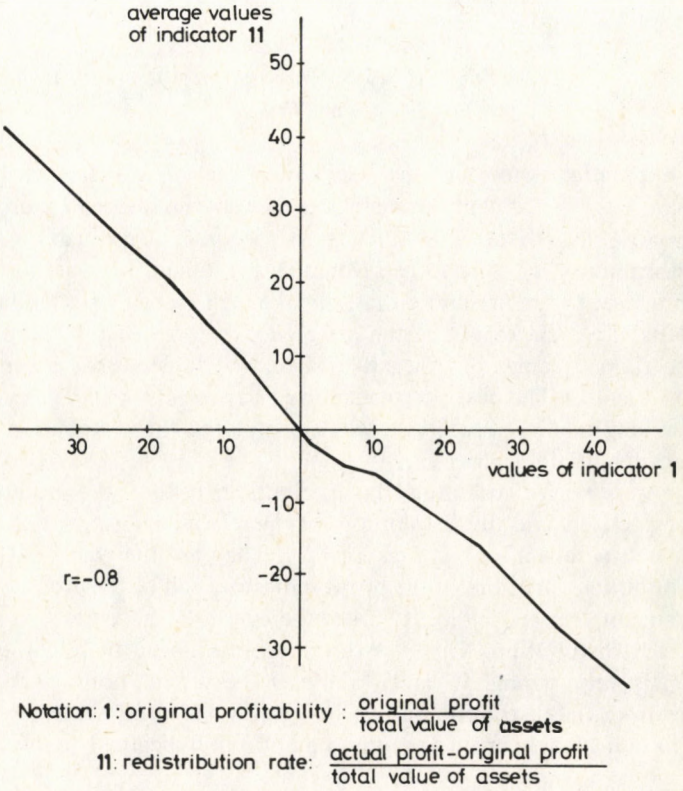


Fig. 2
Redistribution ratio as a function of the original profitability. Economy-wide total, 1980

*Outstanding are, with their richness of ideas and detailed documentation, the studies by Mária *Csanádi* [1], [2], and Erzsébet *Szalai* [11].

superior authorities through personal ,ties. These groups of the favoured–their sets defined according to the criteria a) to d)–are partly overlapping. There are quite a few firms which have a chance to be favourably judged according to two or three, or even according to all the four above-mentioned criteria.

We have started to investigate the question relying on our own data, but the results are, for the time being, rather inconclusive. We are unable as yet either to prove sufficiently, or to refute the hypotheses about the assertion of any of the criteria a)–d). The investigation of the problem is still being carried on.

Only one redistribution criterion has been found, the practical assertion of which has clearly been verified by our own computations.

HYPOTHESIS 3. Through inter-firm redistribution, profit and profitability are levelled.

Our computations show that the extent and direction of the redistribution–favourable or unfavourable treatment–strongly depend on the degree of profitability. The interpretation of *Fig. 2* is very instructive. If the original profitability of the firm is negative, redistribution is found to be favourable for it, and the larger the loss, the larger also the preference: the redistribution ratio is of a higher positive value. In proportion to growing profitability, the extent of the preference is decreasing. If there is no loss, the redistribution ratio becomes of a negative value, and it decreases in proportion to the growth of profitability. The observed tendency clearly results in a levelling of incomes.

The levelling is clearly seen also when comparing the distribution of the various profit and profitability indicators.*

If there were no redistribution, the distributions both of the absolute indicators 1, 2, 3 and 4 respectively and the distributions of the relative indicators **1**, **2**, **3** and **4** would be identical. Let us take a look at *Figs 3 and 4*. They are the graphic depictions of the empirical distribution functions of the profit indicators and of the profitability indicators for the industry of the year 1980. It strikes the eye in both figures that differences are great with each distribution. This is a further confirmation of hypothesis 1, i.e. that redistribution is very strong. It largely deflects the distribution of actual profits and profitabilities from the distribution of original profit and profitability. Progressing from indicator 1 to indicator 4 (or, in the other figure from indicator **1** to indicator **4**) we can

*By distribution of a variable we understand, with what "chance" a unit falls into one or another category of the possible values of the variable. In this case it means, for example, that we examine, what the probability is that the profit of a firm will be between 0 and 100 000 forints. If the "chances" are computed for each category, they will make up together the distribution of the variable under examination.

The distribution can be described by the so-called empirical distribution function $f_n(x)$. Its definition: $f(x) = k_i = n\Delta x_i$, in which n stands for the number of the sample elements. Δx_i for the width of the i-th class interval, k_i for the sample elements belonging to the i-th class interval.

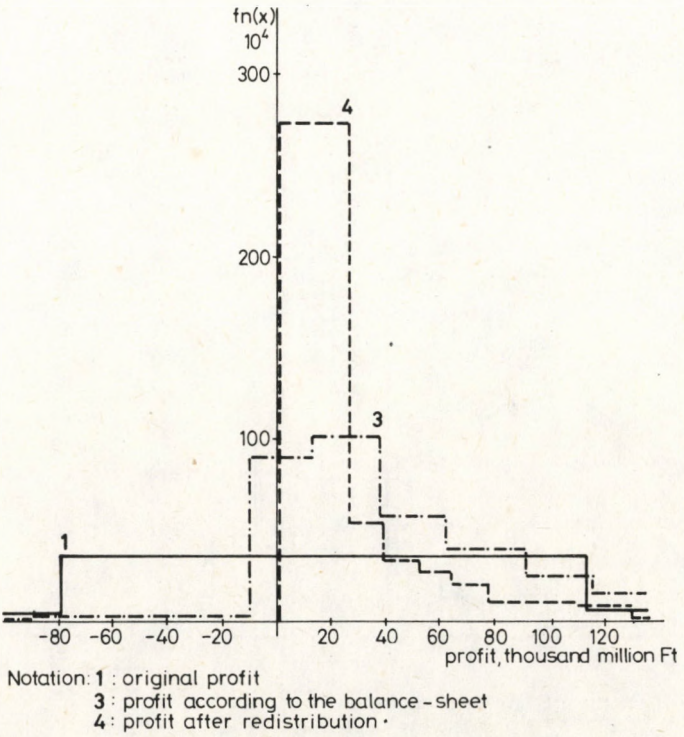


Fig. 3
Distribution of the values of the profit indicators. Industry, 1980

see that the distribution shrinks into a smaller field and becomes "peaked". For example, while the values of indicator **1** are in the zone between 15 percent and + 27 percent, the values of indicator **4** cluster in a much narrower zone between 0 and 12 percent.

The two figures clearly show both sides of the levelling: profit is taxed away from where a lot has been accumulated, and those who have suffered losses are compensated. The same is demonstrated in *Tables 3 and 4.* Advancing through the phases of redistribution, the number of firms whose profitability is extremely high gradually diminished. And, conversely, loss is gradually "disappearing". The last row of *Table 4* is perplexing: according to indicator **4**, almost no loss-making firm exists at all! Redistribution guarantees that almost every firm can produce the illusion of operating "without losses".

One further test will be described: that of the variance of the profitability indicators. (See *Table 5*) With the exception of the building industry, the variance of profitability according to the balance sheet **3** is much smaller than that of the original

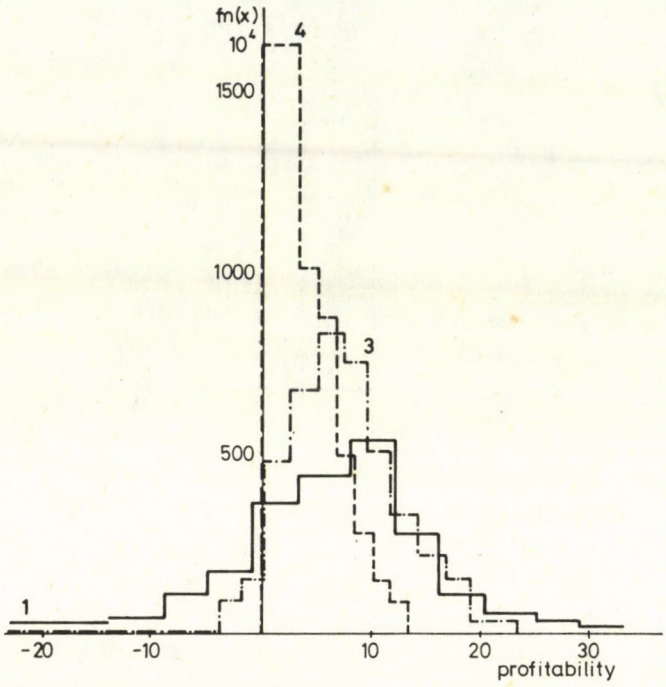


Fig. 4
Distribution of the profitability indicators.
Industry, 1980

Table 3

Number of firms with high profitability
1980 national economy total

Profitability indicator		Value of indicator in percent			
		above 30 total	30–50	50–70 ,	above 70
1	Original profitability	168	70	54	44
3	Profitability according to the balance sheet	68	62	6	0
4	Profitability after redistribution	8	7	1	0

Table 4

Share of loss-making firms
1980 economy-wide total
according to number of firms

Profit indicator		Share of loss-making firms in percent
1	Original profit	24.02
3	Profit according to the balance-sheet	2.32
4	Profit after redistribution	0.18

profitability **1** in every sector and in every year. In most sectors and in most years the variance of profitability after redistribution **4** further decreases, though with some exceptions.

The breaking away of the profit share from the profit

> . . . all the party were placed along the course, here and there. There was no 'One, two, three, and away!', but they began running when they liked and left off when they liked, so that it was not easy to know, when the race was over . . . Dodo suddenly called out 'The race is over!', they all crowded round it, panting, and asking 'But who has won?'
>
> The question the Dodo could not answer without a great deal of thought, and it stood for a long time with one finger pressing upon its forehead while the rest waited in silence. At last Dodo said *'Everybody* has won, and *all* must have prizes'.
>
> (Lewis Caroll: Alice's Adventures in Wonderland*)

The workers of state-owned firms receive a part of their earnings by right of "profit share". When the economic mechanism was reformed, this source of earnings was intended to make the whole collective of the firm interested in increasing the profit. The principle of profit-sharing would be clearly asserted, if 1) the loss-making firm did not pay out profit shares, 2) a monotonously increasing correlation existed between profit shares and profitability in the profit-making firms, and 3) this correlation were uniform in the different branches and sectors of the national economy.

*Ariel Books, N. Y. 1982. p. 36 (This quotation was first found in an economic analysis, (though in a different context) in one of Milton *Friedman*'s works.

Table 5

Variance of profitability indicators

National economic sector*	Original profitability 1	Profitability according to the balance-sheet 3	Profitability after redistribution 4
1978			
Industry	32.85	7.81	8.68
Building industry	15.15	16.00	7.58
Agriculture and forestry	6.18	3.95	2.39
Transport and communications	12.22	6.49	7.90
Trade	41.86	8.22	6.08
ECONOMY-WIDE TOTAL	30.30	10.59	7.45
1979			
Industry	33.56	8.04	7.25
Building industry	14.75	15.63	7.33
Agriculture and forestry	6.14	3.93	2.14
Transport and communications	11.91	6.19	6.52
Trade	45.23	8.19	5.41
ECONOMY-WIDE TOTAL	31.31	10.39	6.48
1980			
Industry	32.30	7.51	4.77
Building industry	24.31	14.46	6.22
Agriculture and forestry	7.45	3.91	2.11
Transport and communications	15.09	7.03	6.46
Trade	37.49	9.46	4.89
ECONOMY-WIDE TOTAL	29.35	9.59	5.06

*For brevity's sake, only the largest sectors are shown.

Our computations confirm that all three conditions are massively violated.

HYPOTHESIS 4. Loss-making firms also pay out profit shares. No uniform, monotonously increasing relationship exists between profit shares on the one side, and the original and actual profitability on the other.

The hypothesis would be refuted, if a correlation significantly different from zero showed between profit shares (or, the usual indicator: "to how many days' wages the profit shares correspond") on the one side, and the different indicators of profit and profitability on the other. Such a correlation–which disproves the hypothesis–has only

been found with a few groups of firms, at a low level of aggregation. Apart from these exceptions, in most cases and in most years no correlation significantly different from zero has been found between profit shares and the indicators of profit or profitability. But there is rather a close correlation between profit shares and wages. The profit share is basically adjusted to relative wages; as a matter of fact, it is nothing else than a simple supplement more or less in proportion with wages.

An examination of the linear correlation is not enough to test the hypothesis, since a consistent assertion of the three above-mentioned conditions would be compatible with the existence of non-linear correlations accompanied by a low linear correlation. For a further control, we shall present a few empirical regressions between profit shares and the profitability according to the balance-sheet (See *Figs. 5 and 6*) They clearly demonstrate that in a number of sectors (not in all, though) profit shares are also paid out to workers

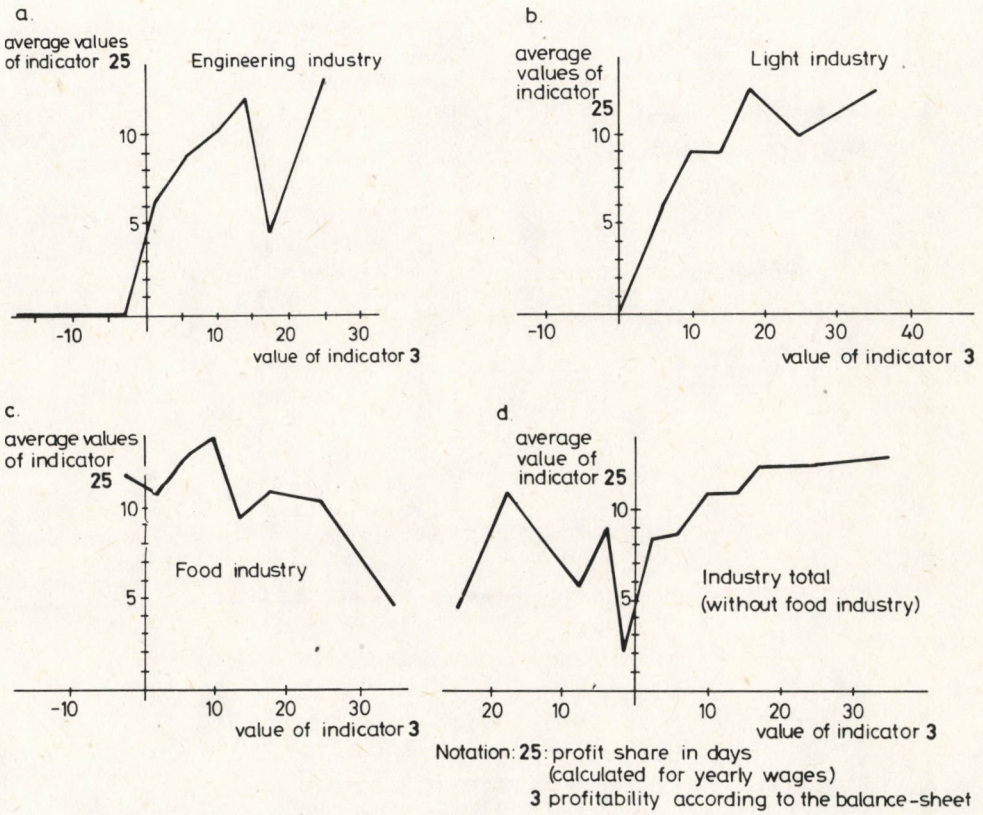
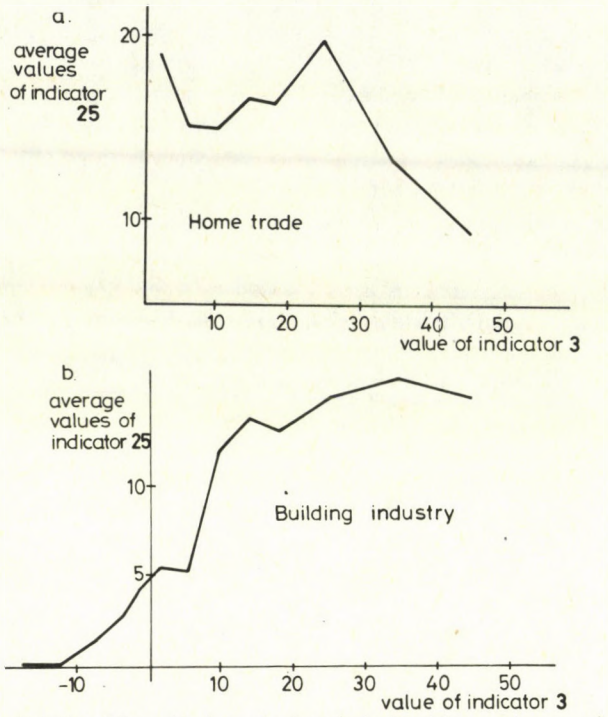


Fig. 5

Empirical regression function between profit share and profitability according to the balance-sheet in industry, 1980



Notation: **25**: profit share in days (calculated for yearly wages)
3: profitability according to balance

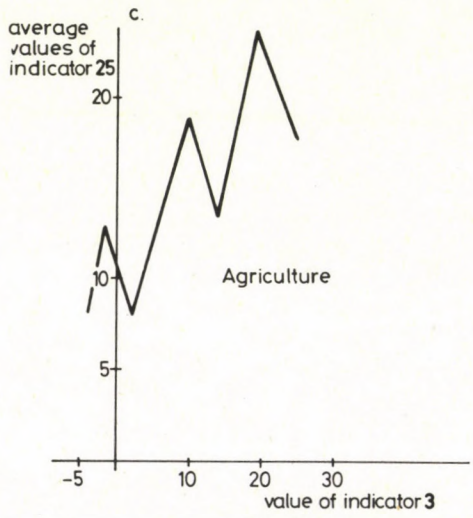


Fig. 6

Empirical regression function between profit share and profitability according to balance in a few national economic sectors, 1980

of loss-making firms. In most fields the relationship is not monotonous: even though the direction of the general relationship is the same (more profit–larger profit share), it breaks at certain points and turns back. What is more, there is a sector–the food industry–in which even the general direction is anomalous, since higher profitability entails lower profit shares. But there exists a sector–the light industry–in which the relationship corresponds to conditions 1 and 2. Otherwise, the sectoral differences themselves signify the infringement of condition 3, that of uniformity.

In the final account, the computations confirm that, as regards the total state-owned sector of the national economy, hypothesis 3 describes the situation correctly.

So far we have not analyzed the interrelation between wages and profit, that is, of profitability. We do plan to investigate this question.

Survival does not depend on profitability

*HYPOTHESIS 5. Survival of the firms is almost guaranteed. Liquidation or merger of firms are independent of profitability.**

Let us consider the number of firms functioning all through the five-year period under examination as 100 percent. In relation to it, the number of the firms liquidated or merged with other firms during those five years makes up 6.5 percent. This we shall confront with the fact that the original profitability was *permanently* negative with more than 20 percent of the firms. This already shows that a permanent loss is not a question of life and death. But it still remains an open issue: what describes the profitability of the 6.5 percent that were liquidated?

The second half of our hypothesis would be disproved if it could be demonstrated that the profitability of the firms liquidated or absorbed by other firms was lower, at least in the majority of cases, than the profitability of those that survived in the long run. The data, however, do not provide such refutal, they show exactly the contrary. Let us have a look at *Table 6.* Two years are examined: 1978 and 1979–this time only in industry. For each year, the left-hand side column contains the average original profitability of the firms which survived all through the five years under examination. And the right-hand side column contains the average original profitability of the firms which were going to be liquidated or absorbed by a surviving firm the following year. This is, therefore, the "profitability prior to death". Apart from two exceptions (mining in 1978 and the food industry in 1979) the right-hand side number is higher than the

*Practically this has been established in Mihály *Laki*'s study [7]. Our computations confirm M. Laki's conclusions.

Table 6

Original profitability of the permanently functioning and of the liquidated firms
percent

Industrial sector*	1978		1979	
	Permanently functioning	Firms liquidated or absorbed	Permanently functioning	Firms liquidated or absorbed
Mining	18.10	12.92		
Electric energy	7.26	8.12		
Engineering industry	17.43	30.50		
Building industry	8.20	16.42		
Chemical industry	13.02	18.52		
Light industry	8.76	21.47	9.13	12.02
Food industry	1.26	4.82	6.19	–3.45

*Only those sectors are shown in the table in which liquidation or amalgamation (absorption) occurred in the years under examination.

left-hand side one.* That is to say, the original profitability of the firms wound up or absorbed was in most cases higher than the profitability of those surviving in the long run. These firms did not "go bankrupt" in the financial sense of the word, but their functioning was ended by administrative measures.

The "softness" of the budget constraint is sometimes interpreted in a way that it provides a 100% guarantee of survival for each firm. This is a misunderstanding. **It is an obvious fact that a small part of the firms ceases to function–the question is only, *why*. Hypothesis 5 and the observations made above confirming it do not weaken but strengthen the truth of the assertions concerning the "softness" of the budget constraint. They provide a further evidence of how little the effect of the budget constraint, that is, the role of profit or loss is. If it wants to, the authority keeps alive the permanently loss-making firm and liquidates the units that work with higher profit than the surviving firms. The life and death of the firm depends on the authority and not on the market.

*Only one case contradicts the hypothesis: the food industrial firms wound up or merged were loss-making in 1979, while those surviving were profit-making. In mining, the situation was different in 1978: it is true that the righthand side number is lower than the left-hand side one, but it still shows a high original profitability.

**The misunderstanding may have been suggested by certain ambiguous formulations of a few publications and lectures connected with the "Economics of shortage".

Investment does not depend on profitability

HYPOTHESIS 6. Investment activity does not depend on either the original, or the actual profitability of earlier years.

In one of the tests the relationship between profitability and investment activity was examined in the deepest disaggregation, that is, on the level of firms. It was assumed that profitability could influence the investment activity–if at all–only with some time lag. Thus it was examined, how strong the correlation was, for example, between the 1975 values of indicator **1** (original profitability) and the 1976 values of indicator 8 (investment activity), for all the state-owned firms. This figure can be read in the first column of the first row of *Table 7:* the correlation coefficient is there –0.03. The following figure shows that the correlation coefficient is 0.03 between the 1975 values of indicator **1** and the 1977 values of indicator **8** and so on.

A refutal of hypothesis 6 would be if at any point of the Table, starting from any profitability figure and with any time-lag structure, high correlation coefficients were obtained. The Table, however, clearly shows that no correlations significantly different from zero exist.

Another test of the hypothesis was made at a higher level of aggregation. With a breakdown of the industrial sector into 9 subsectors, and with a further 6 non-industrial sectors, the *average values* of the indicators are known for altogether 16 groups of firms. It was examined, how close the correlation between the average profitability of the groups of firms (sectors, resp. subsectors) and their average investment activity was, with a two-year time-lag between profitability and investment activity.* As for the effect of the original profitability: the value of the correlation coefficient is +0.15. And as for profitability after redistribution, the value of the correlation coefficient is only +0.05. This computation made on the level of groups of firms does not refute the hypothesis, either.

A further analysis of the relationship between profitability and investment activity was the purpose also of the computations of lagged empirical regressions made for the different groups of firms. For illustration, we show the figures obtained relying on the data of all the industrial enterprises (See *Fig. 7*). We can see practically between investment activity and profitability in the positive profitability domain. There is a certain tendency with the loss-making firms: the greater the loss in a given year, the lower the investment activity will be after two years. But the investement activity of even the worst loss-making firms is hardly lower than that of profit-making firms.

*Interdependent pairs of data are considered the 1976 value of indicator **1** and the 1978 value of indicator **8**: the 1977 value of indicator **1** and the 1979 value of indicator **8**: and the 1978 value of indicator **1** and the 1980 value of indicator **8**. These are altogether 3 x 16 = 48 pairs of data. We have similar 48 pairs of data for the examination of the interdependence between indicators **4** and **8**.

Table 7

Lagged correlation between profitability and investment activity

Profitability indicator in the year shown		Correlation coefficient with the indicator 8 of investment activity in the years as follows				
		1976	1977	1978	1979	1980
1 Original profitability	1975	–0.03	–0.03	–0.04	–0.04	–0.02
	1976		–0.03	–0.07	–0.04	–0.08
	1977			–0.04	–0.01	–0.07
	1978				–0.03	–0.11
	1979					–0.08
3 Profitability according to the balance-sheet	1975	–0.07	–0.07	–0.03	–0.03	0.03
	1976		–0.07	–0.04	–0.03	0.01
	1977			–0.04	–0.03	0.01
	1978				–0.04	0.00
	1979					0.00
4 Profitability after redistribution	1975	–0.07	–0.07	0.04	0.02	0.06
	1976		–0.04	0.26	0.23	0.13
	1977			0.30	0.27	0.14
	1978				0.12	0.13
	1979					0.09

We are planning several further analyses. The first computations indicate that investment activity is largely dependent on external resources and almost independent of the firm's own resources–this suggestion needs, however, some thorough control computations. Also, we plan to analyze later on the relationship between the *growth* of the firm and its profit and profitability, when growth can be measured by means of various indicators, such as the growth of production, fixed capital, total capital, staff number, etc.

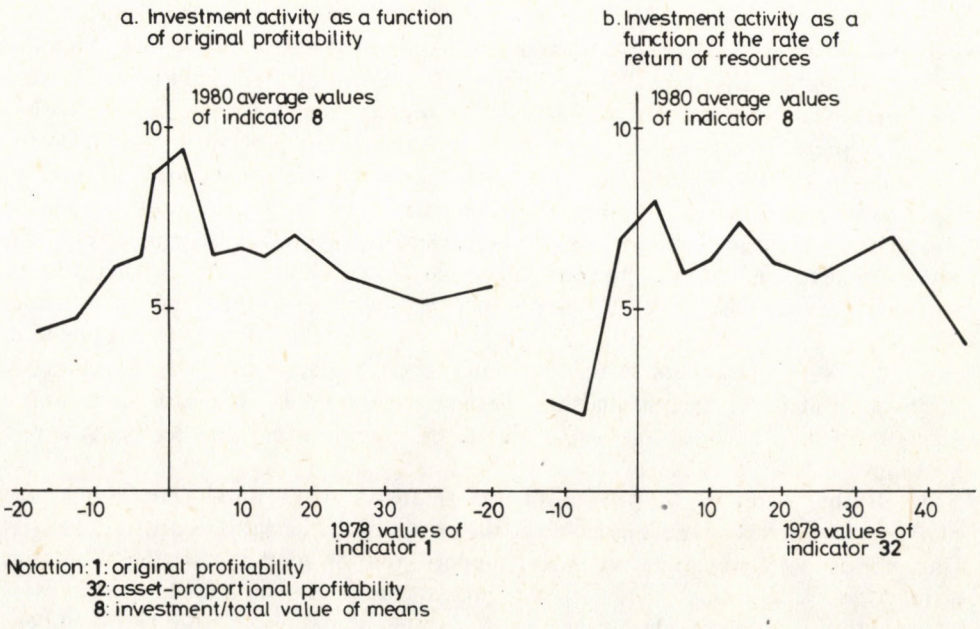


Fig. 7

Empirical regression function between investment activity and profitability Industry (without food industry)

General conclusions

Our investigation has not revealed surprisingly new facts. It was not supposed to: our intention has been to test empirically a few known hypotheses. Let us admit that in the course of our debates in Hungary we are used to feel the truth of some statement as "obvious" and are prone to forget that it is the duty of the scientist to receive seemingly self-evident observations with doubt and confront them with empirical facts.

We think that *the six hypotheses set forth in the foregoing are acceptable,* and provide sufficient grounds for drawing a few general conclusions. We shall soon do so, just an important remark on methodology has to be first made. We do not wish to suggest that, relying on a mass of data, the truth of the hypotheses, and of the conclusions drawn therefrom has now been "proved". This is not even to be expected from such an empirical verification.* The *strict proof* of the truth of a proposition aspiring to general validity can only be provided in a deductive way. Through adequate transformations of certain premises, propositions and conclusions can be deduced. In such a case, the

*The sphere of problems just touched upon here has a wide philosophical and science theoretical literature. Among others, the works of *Popper, Lakatos,* and *Altrichter* can be mentioned.

question can be unambiguously answered, whether, with the given premises, the conclusion is true. As opposed to this, in the empirical way it is not possible to clearly prove a theoretical hypothesis of generalizing character, not even if mathematical-statistical methods are used for the purpose. What we can examine on such occasion is a much less pretentious question: how "near" or "far" the hypothesis is to or from the fragment of reality we observe. "Nearness" supports and strengthens the original hypothesis, and "farness" weakens it. The latter case encourages the theoretical researcher to try to set up a better hypothesis. An unambiguous verification or refutal is not to be expected already because the observation itself may be inexact for the following reasons: The practical definition from the given set of numbers is always problematic. The application of the mathematical-statistical procedure chosen is bound to certain conditions, and the actual observation does not perfectly satisfy these conditions. The final result of the analysis may have been exposed to the favourable or unfavourable effects exerted by circumstances exogenous to the procedure on the indicators observed, and so on.

All this warns us to beware of two extreme standpoints. One is excessive confidence in numbers and especially in the power of mathematical-statistical analysis. Thus we do not "prove" but at most "support" one or another assertion. The other extreme is "overtesting". Doubts and uncertainties can be raised against every mathematical-statistical analysis, already on account of the above described considerations. Therefore, every empirical support could be completed by better and later by still better computations. We wish to refrain from such "perfectionism". If the validity of a hypothesis can be understood and accepted by theoretical-logical reasoning and it is strongly supported by the computations, it is not worth searching for further supporting results. Rather, it has to be accepted that some doubts or uncertainties remain. There is, of course, inevitably a certain amount of arbitrariness or subjectivity in where we shall draw the limit beyond which we appreciate the confirmation of the hypothesis as "strong". What is reassuring: testing is open to everyone. Even if a hypothesis is acceptable to us, another researcher may come forward at any time, carrying out further tests perhaps on a different data base, and he may arrive at such results which will encourage refutal of the hypothesis and the setting up of new ones.

After emphasizing our reservations, we think we have a right to draw a few general conclusions in a clear-cut form, without any circumspect formulation.

In the Hungarian economy the budget constraint of the state-owned firms is soft. As it has been stressed at the beginning of this article, this is to be measured first of all by the *consequences*, primarily by how much the firm's survival and its investment activities depend on profitability. In our opinion, this assertion has adequately been confirmed by testing hypotheses 5 and 6, though it will be useful to further examine the relationship between growth and profitability.

The softness of the budget constraint can also be approached from the side of the *"softening methods"*. At the beginning of the article, four principal methods were enumerated. Of these, two have been covered by our research (state subsidies and taxes),

the third (the credit system) and the fourth (state price setting) are outside its sphere. In our judgement, our test adequately supports the statement that *the nature of redistribution as it works in Hungary is in itself sufficient to soften the firm's budget constraint.* The word *"sufficient"* is especially stressed. We do not maintain that the other two factors do not play an important role. If, *in addition,* the actual practices of the credit system and of the central price setting are also "soft" (and it is strongly suspected that they are), it is *a fortiori* true that the four factors together would provide for the softness of the budget constraint. The reverse statement is also held to be true. Even if the practices of the credit system and of the central price setting were "hard", the behavioural regularities of fiscal redistribution prevailing in Hungary would be able to counterbalance this and to soften the budget constraint.

Now we shall revert to a question already touched upon in this article: that of the relationship between redistribution and prices. Two different directions of cause and effect exist. In one of them, the fixing of the output price comes first and subsidies or taxes or at least some of their elements are adjusted to it. For the sake of certain considerations (welfare policy, influencing supply or demand, etc.) the central price policy fixes the price much higher or much lower than the sum of costs, a normal profit, and state tax. By means of special redistributive elements, it taxes away the additional income earned, or provides for cover of the additional costs. The other direction of cause and effect is that a form of tax or subsidy is given, fixed, if by no other thing, habit. In the course of repeated open price adjustments or disguised price increases the price gets formed from the outset in a way that the taxes and subsidies are "counted into it". We did not undertake to perform this separation. All the less so, as it has no importance for our subject, the softness or hardness of the budget constraint. Our concern is not fo find out, whether one or another tax or subsidy is "expedient" or "desirable" Whether it is or not, the many kinds (justified or unjustified) of redistributive processes *jointly* exert a certain effect, and it is this joint effect we wish to find out about.

We hold it to be possible that an inter-firm redistribution of not too high rate and taking place with clear and firm rules of the game do not yet soften the budget constraint. We presume that in this respect certain critical threshold (or threshold-intervals) do exist. It seems that *the Hungarian state-owned sector has passed far beyond these critical thresholds in respect of the proportions, clarity, and stability of redistribution.* Redistribution is of huge dimensions. It is extremely intricate and confused, composed of a hundred different taxes and subsidies. The rules of the game change continuously, not in the last place upon the pressure and "lobbying" of those affected. The only thing that remains is the experience that the profit is always "taken to pieces". Much is taken away from those who have much, and those who have little have a good chance of getting compensated. Under such circumstances, good connections of the firm with the superior authorities are much more important than the way its products are received on the market.

At one point, however, the examination produced a surprise, at least to the authors. The budget constraint proved to be even softer than what we had expected. We thought it

must have hardened somewhat since the 1968 reform.* It is true that no examination with statistical methods has been carried out to compare the situation before and after 1968. In any case, *no apparent sign of a hardening of the budget constraint has been found.* We do not allege with this that the state-owned firm is perfectly indifferent towards profit or prices. But, even if it is to a certain extent interested in the development of proceeds and expenses–which shows in some of its actions–, it can always find an escape from the consequences of loss. And this is what counts from the aspect of the question we have asked.

In the late 1970s several official declarations were heard emphasizing the necessity of making the conditions of financial management harder. Several measures were taken with this expressed aim. Have those declared intentions been carried into effect?

In the analyses we have made so far the data of only one year are at our disposal. We can say that *in 1980 no change, no radical turn, no "qualitative leap" took place.* (Also the reader can see, if he compares the 1980 data with those of earlier years, that no significant change in tendency shows.** Continuing our research, we wish to extend the time series up to 1982–and then we can revert to the problem.

We hope that our further research can produce an answer not only to this last question, but that it can also throw light on a few other important interrelations between the financial system and policy, and the firms' behaviour.

References

1. Csanádi, M.: A vállalatnagyság, a jövedelmezőség és a preferenciák néhány összefüggése (A few interrelations between the firms's size, profitability and preferences). *Pénzügyi Szemle,* 1979, 2, pp. 105–120.
2. Csanádi, M.: Beavatkozás, szelekció, kölcsönös alkalmazkodás. Munkaanyag (Intervention, selection, mutual adjustment, Work material). Pénzügykutatási Intézet, Budapest February 1983.
3. Deák, A.: A reformot előkészítő pénzügyi számítások néhány tapasztalata (A few experiences of the financial computations preparing the reform). *Közgazdasági Szemle,* 1968, 7–8, pp. 854–868.
4. Kornai, J.: *Economics of shortage.* North-Holland, Amsterdam 1980.
5. Kornai, J.: "Hard" and "soft" budget constraint. *Acta Oeconomica,* Vol. 28, Nos 3–4, pp. 231–245. (1982)
6. Kornai, J. – Matits, Á. – Ferge, A.: Az állami vállalatok jövedelmének redisztribúciója – Első beszámoló (Redistribution of the income of state-owned firms – First Report). Ipari Minisztérium (Ministry of Industry), Budapest 1983. Mimeographed.
7. Laki, M.: Liquidation and merger in the Hungarian industry. *Acta Oeconomica,* Vol. 28, Nos 1–2, pp. 87–108. (1982)

*See Section 13.6 of the "Economics of shortage" [4].

**One of the authors of the present article: Ágnes Matits examined, together with József *Temesi,* similar problems within the framework of a research project independent of the present one, using a data base and methodology partly different from ours. They arrived at the conclusion that in the years 1980–1981 the earlier tendencies continued further in the financial indicators of the firms. See [8].

8. Matits, Á. – Temesi, J.: Changes in economic regulators and enterprise reactions. *Acta Oeconomica*, Vol. 31, Nos 3–4, pp. 197–208 (1983)
9. Matits, Á. – Sulyok Pap, M. – Temesi, J.: A költségvetési elemek rövidtávú előrejelzésének lehetőségei mikroökonómiai összefüggések alapján (Possibilities of short-term prognostication of budgetary elements on the basis of microeconomic interrelations). MKKE, MSZI, Budapest 1981. Mimeographed.
10. A normativitással kapcsolatos értelmezések és kísérlet a normativitás érvényesülésének körvonalazására (Interpretations of normativity and an attempt to outline the assertion of normativity). Pénzügyminisztérium (Ministry of Finances), Budapest 1982. Mimeographed.
11. Szalai, E.: The new stage of the reform process in Hungary and the large enterprises. *Acta Oeconomica*, Vol. 29, Nos 1–2, pp. 25–46. (1982)

О МЯГКОСТИ БЮДЖЕТНОГО ОГРАНИЧЕНИЯ — НА ОСНОВАНИИ ДАННЫХ ПРЕДПРИЯТИЙ

Я. КОРНАИ—А. МАТИЧ

Вначале в статье объясняется понятие «твёрдости» и «мягкости» бюджетного ограничения предприятия, а затем излагаются результаты статистического анализа финансовых данных по венгерским предприятиям за 1975—1980 гг., проведенного авторами статьи вместе с рядом других исследователей. Одной из целей исследования было сопоставление теоретических гипотез о мягкости бюджетного ограничения с практическим опытом. Анализ данных подтверждает шесть следующих гипотез:

1. Централизованное перераспределение доходов государственных предприятий происходит в весьма широких масштабах. Под влиянием этого фактическая рентабельность отрывается от «первоначальной рентабельности». (В статье так называется «очищенная» от последней, непосредственно затрагивающей предприятия стадии перераспределения, т. е. рассчитанная без дотаций и изъятий рентабельность.)

2. В промышленности эффект перераспределения гораздо сильнее, чем в сельском хозяйстве.

3. Убыточные предприятия также выплачивают своим работникам участие в прибылях. Нет однозначной, монотонной связи между участием в прибылях, с одной стороны, и первоначальной и фактической прибыльностью, с другой.

4. Благодаря перераспределению происходит нивелирование прибыли и рентабельности.

5. Выживание предприятий почти гарантировано. Ликвидация и расформирование предприятий не зависит ни от первоначальной, ни от фактической рентабельности предшествующих лет.

Из всего этого авторы делают общий вывод о том, что бюджетное ограничение государственных предприятий в Венгрии является мягким, и даже в 1980 г. не было заметно признаков его «отвердевания».

Acta Oeconomica, Vol. 32 (3–4), pp. 251–268 (1984)

REFORM AND FINANCIAL INSTITUTIONAL SYSTEM IN HUNGARY

L. GY. ASZTALOS – L. BOKROS – GY. SURÁNYI

As a part of the further development of the system of economic control, it is indispensable to modernize the system of financial institutions. The whole banking system is one-sidedly subordinated to the mainly natural plan-decisions and to the state budget. On the other hand, the subordination of the banks within the central hierarchy of economic control is reflected towards enterprises as dependence on state administration. After outlining the main types of proposals for transforming of the banking system the authors briefly expound their own standpoint. The most important thing is to secure a relative autonomy for the role and institutions of monetary policy. In the long run also the establishment of a two-level decentralized system of competing banks is necessary which would secure an actual possibility of choice for every income-holder. For the short run the authors make a proposal for such transitory measures which partly take into account the existing restrictions, and partly promote an activity of the financial institutions based on interest in income.

The events of the last decade have shown that the economic difficulties of Hungary, and its considerable indebtedness are not simply a consequence of the deteriorating foreign economic conditions, but also of the inadequate functioning of the institutional system of economic control and management in the broad sense. The reaction of the Hungarian economy on the accelerated world economic changes has been always slow as well as defensive.* Instead of a structural transformation to be recognized also by the world market, a strategy of cautious adjustment has been adopted, to which the banking system has more or less satisfactorily contributed. In the long run, however, the Hungarian economy can come up to the world economic requirements only if the financial institutions do not just passively accept and mediate the central decisions, but are able themselves to encourage or force the other sectors of the economy to fast and flexible adjustment to the changing conditions. At the same time, it would be an illusion to assume that the transformation of the system of financial institutions alone can bring about the conditions of an active economic adjustment. Modification of the banking system is a necessary but not sufficient condition of the further development of the economic control and management system (ECMS). It follows that it would be useless only to transform the banking system, since this would only increase the costs and

*"All this leads to a wary and passive attitude, avoiding any important changes, continuously building up inner reserves – and partly consuming these when requirements grow stricter – proving repeatedly the readiness to adjust to changing expectations, jealously guarding monopolies, and that not only through market relations." [1]

tensions without involving apparent advantages. Of course, costs and tensions will arise also if the modernization of the banking system fits organically into the modernization of the whole of the ECMS. These, however, can and must be undertaken with a view to development.

Major contradictions in the functioning of the present Hungarian banking system

In its present form, the banking system can perform several of its duties only imperfectly, worse than what could be expected:

1. In the allocation of resources the bank credits granted to enterprises play a *subordinate* role in terms of both quantity and quality. Quantitatively, mainly because too much income is reallocated through the budget. Thus the incomes flowing through the budget are determinative also for capital formation. Money granted on the basis of decisions lacking objectivity (that is, market considerations) with less strict demands for returns slackens in itself the norms of the credit sphere. And qualitatively, mainly because the plan prevents, from the outset, a comparison of the development objectives, and thereby the independent bank decision asserting the profitability aspect, both formally (for example, through the sectoral quotas) and informally (for example, through "large investment projects" financed from the credit quota earmarked for export development).

2. The amount of money in circulation must be regulated in accordance with business fluctuations. *The quantity of money which increases through the budget does not fulfil the requirements of a flexible regulation at all,* since regulation thus becomes *asymmetrical.* This means that the composition by money-holders of the amount of money in circulation cannot be influenced, because the money issued through the budget permanently in the red does not become extinct even formally, thus it cannot be reallocated to new money-holders. In case of a boom, this procedure may be suitable for the *distribution of the increment* of the amount of money, but in case of stagnation and recession it causes, directly and indirectly, *inflation* or *forced accumulation of money,* thus impeding a structural transformation in accordance with market demands.

3. Short-term credits have been playing an ever shrinking role in financing working capital since the 1970s. ([2], [3]) *The system of financing working capital is too rigid.* This system prescribes (independent of the economic results of the enterprises) a uniform self-financing for the permanent increment of the working capital. This constrains, unnecessarily, the dynamical development of the profitable enterprises. The system leads to the enterprises' mutual indebtedness. Partly because of this, in 1982–1983 the number of temporarily insolvent enterprises grew considerably. On the other side, the number of enterprises financing their circulating assets exclusively from their own resources is constantly growing, which reduces the possibilities of exerting an influence through credits.

4. The preceding seems to suggest that the National Bank of Hungary is unable to avail itself of these typical banking instruments to regulate the quantity of money. Besides, *the arsenal of regulation mostly lacks securities, too.* At the same time, it is obvious that it is necessary to regulate solvent demand in accordance with external and internal equilibrium conditions. For lack of the proper banking instruments, as mentioned above, the bank is compelled to resort to authoritative (administrative) instruments to fulfil this function. Repayment prescriptions not in conformity with the agreements, posterior modification of interest clauses, one-sided withdrawal of the enterprises' own resources, etc. often are against the bank's will. However, the substance of the matter is that the basically unbusinesslike relation between the bank and enterprises is another authoritative-administrative element in the economic control system.

5. It is a further difficulty that *the institutions and forms of acquiring permanent resources* on the basis of profitability are lacking. Thus credits are used for a permanent and definite expansion of resources. As a consequence, terms of repayment are growing longer and longer; a term over ten years is practically unpredictable: under the prevailing conditions of regulation hardly any risk or responsibility can be assumed for such a long time. In such a case the credit is not an advance on future incomes, and this kind of credit makes it impossible to assert the conditions of the loan. The latter does not only mean that the original requirements finally become untenable, but also that the requirements regarding returns are irrealistic from the beginning, even in the case of permanently profitable enterprises, if the credit is the only external resource. The formally high requirements feed profit inflation, and the non-fulfilment of requirements credit inflation (money getting stuck in circulation). [4] In the end, it cannot be decided at all, whether it is the poor management of the debtor, or the irrealistic credit terms and regulators that make it impossible to repay the credit.

6. Recently, the stock of expired and rescheduled credits has considerably grown. Although the bank *formally disposes of the right of pledge,* under the prevailing conditions it is unable to collect overdue debts—and it is not interested in it, either. Owing to its position in the hierarchy of state administration, the bank is not in a position to assert its right of pledge.

On the one hand, as it follows from the preceding, the bank itself cannot draw the line between the responsibility of the enterprise and that of the economic control agencies, and, on the other hand, it is of unlimited solvency—at least within the country—and, therefore, entirely insensitive to profit. The inner structure of the bank is based on the sectoral (industrial branch) principle. Therefore, the sections of the bank are more closely tied to the sectoral (branch) interests than to the requirements of the banking functions. A third aspect: very often it is extra-economic considerations that compel the bank not to assert its right of pledge. By this attitude, the bank also frees the economic units from taking risks, thus entirely separating their development from the value judgement of the market.

7. *No such institutions exist which would deal, on a business basis, with the winding up or transformation of the enterprises that have gone bankrupt.* No such

enterprises exist which could play the role of a mediator in the reallocation of resources between the old and the new managers, and the forms of securities needed for the effectuation of such transactions are also lacking.

8. At present, among the investment projects implemented on the basis of central decisions there are several ones towards which primarily profitability requirements could and should be raised. The resources needed for the implementation of such types of projects are, however, handled by such institution which are, because of their strict plan obligations [6] and owing to their inner structure, *unable to allocate resources in a way consistently asserting profitability aspects.* It is, namely, impossible, within an institution to assert both purely physical and purely profitorientated development decions. This makes the inner system of incentives contradictory.

9. The "large enterprise structure" and the lack of a "background of small and medium enterprises" are still characteristic of the Hungarian financial institutes. On the one hand, few financial institutes are interested in financing projects requiring less money and with a fast rate of return and, on the other hand, the few such institutes existing have rather limited perspectives for expansion. Finally, what really impedes the development of the small financial institutes is that they are not licensed to collect deposits, keep accounts and grant credits on circulating assets, and thus cannot be competitors of the traditional financial institutes.

10. *The households' propensity to save* may have been of lesser importance in the period of a relatively fast growth. However, in the period of slow growth and stagnating living standards—apparently to last for some time yet—it is no longer a negligible factor. The monopoly of collecting private individual deposits, and of granting credits to private individuals, the scarcity of attractive saving and investment possibilities, the poor forms of insurance, and the total insensitiveness to profit of the institutions handling savings (National Savings Bank, National Insurance Company) keepthe households' propensity to save at a level which is too low. [7].

The above-mentioned deficiencies seem to be of a too narrowly professional nature, however, most of them are the surface manifestations of deeper-lying, general problems affecting the whole of the system of financial institutions. The deficiencies of the Hungarian system of financial institutions are rooted, in the final account, in the fact that *the role of financial policy in economic control and management has not been clarified.* It follows that the conditions of activities, rights and obligations are not clearly laid down either for the financial institutions, or for the managers and employees. Under such circumstances it is impossible to define and assert responsibility. It is a natural consequence that *informal regulation* comes into prominence, and under these conditions financial policy and its institutions become increasingly *defenseless.*

The banking system as a whole is *unilaterally subordinated* to the plan decisions and to the budget, mainly of natural motivation. Within the financial policy subordinated to the plan, even fiscal policy has obtained almost unlimited privileges over monetary policy. The monetary policy and its representative, the banking system have thus lost importance among the government institutions.

The subordination of the banking system within the central economic control hierarchy is reflected, in its relation with the enterprises, in a *dependence of a nature of state administration.* This means that as long as the banking system in a monopolistic position is not compelled to assume due responsibility for the development of the monetary processes, and as far as enterprises are concerned, the "state administration adjustment" behaviour is asserted to the prejudice of market considerations.

The most important tendencies of the ideas about the further development of the banking system*

The first group of the suggestions would leave today's one-level banking system practically as it is, and would only refine and complete the existing instruments of financial management. [10], [11], [12], [13] These suggestions are made on the ground that an expansion of commodity and money relations, and the strengthening of enterprise independence necessitate exactly a greater role of central regulation through finances. The arguments supporting the maintenance of the one-level banking system are drawn primarily from the deficiencies in the functioning of the two-level banking system. The most important of these deficiencies are the following: no real competition exists among the banks, the risk of bankruptcy is practically negligible, and thus the profit motivation of the banks is very weak, the possibility of central influence is minimum; the parallelly built up apparatuses only increase the administrative costs.**

As regards its substance, the suggestion belongs to this group, which agrees, theoretically and in general, with the decentralization of the banking system. However, it does not hold it timely as long as the conditions of a regulated market competition do not dominate in the economy, and every element of the economic control and management system does not change in this sense.*** The holders of this opinion have lately recognized the necessity of establishing a few small and specialized banking institutions. They wish, however, to regulate their activities so as to prevent their development into independent banks and to exclude their control through monetary means.

The other characteristic type of suggestions has been formulated by those economists and financial specialists who press for an immediate and consistent decentralization of the banking system. ([19], [27], [28], [29], [30]) The timeliness of this suggestion is closely related to the fact that the 1968 reform left the entire institutional system of the ECMS, including the banking system untouched. Recognizing

*For a survey of the discussions about the banking system see [8], [9].

**International experience seems to contradict these statements. ([15], [16], [17], [18], [19], [20], [21], [22], [23], [24], [25], [26]).

***It is not yet clear to us why the banking system ought to be transformed if all that comes true, or, in which way such change could occur without transforming the banking system.

this fact, those who press for a radical transformation of the banking system wish to change the proprietory and financial organizational system of control by one stroke. They are of the opinion that the conditions of market competition have to be created also among the financial institutes, and the dependence of enterprises on banks as authorities ought to be ended. At the same time, by starting the trade in securities, a system of flow of resources motivated by profitability considerations should be established. A further advantage of decentralization would be the widening of social control, encouraging a healthy competition as well as a rotation of managers. The supporters of such a reform believe that it would also be important to eliminate the subordination of the financial sphere and to increase the role of the means of monetary control.

Between these two extreme standpoints, there are several intermediary suggestions. Of these, the opinion is by all means to be mentioned, according to which it is necessary, though within the framework of the one-level banking system, to draw the line between the function of the issuing (central) bank and the credit bank, and to increase the role of the means of monetary control. [1], [31], [32]

Formally, the conception is similar according to which it is not a realistic target to establish a two-level system within a short perspective and suggests, as a first step, to separate the functions of the issuing bank and of the credit bank within the National Bank of Hungary. The essential difference between the two conceptions is that the representatives of the latter one consider it as the beginning of a long process which will lead to establishing the conditions of a decentralized, two-level system of competing banks. [33], [34], [35]

Our own proposals are near to this latter conception. In the following we shall outline—as a starting-point—the objectives the achievement of which may make it reasonable to transform the system of financial institutions.

The purpose of transforming the banking system

The transformation of the banking system is expected primarily to open the way to *credit granting on the basis of business considerations*—first of all a qualitative and only secondarily a quantitative question. The purpose is that short, medium, as well as long-term credits equally be able to regulate the volume of money in circulation in a flexible manner. To this end, it has to be ensured that the banking institutions can carry on an autonomous credit policy and crediting activity, on the basis of their own preferences and business considerations, and taking into account their *liquidity position.* This infers that the one-sided subordination of the monetary sphere to the plan and the state budget would cease. In the new situation, the budget itself would be forced to rationalize the structure of its revenues and expenditures and to assert economic considerations.

The institutional, legal and financial conditions of a *permanent allocation of funds (capital) on the basis of profitability* have to be created. Various forms of the allocation of funds may ensure that the medium- and long-term credits fulfil only the classic function of credit, that is, the function of advance payment on incomes to be actually earned in the future. This might put a brake on the present profit and credit inflation and would make realistic and consistently enforceable requirements on the enterprises. As for the latter, it is further necessary that the banks grow sensitive to the profitability of their activities and be interested in maintaining their liquidity, for which organizational changes within the existing banking institutions as well as the creation of new ones are needed.

In financing centrally decided investment projects the aim can be set that the profitability requirements be clearly enforceable, ensuing from the financial institutions' *own interests,* with all projects the nature of which allows this. Further, it is extremely important, also in the national economic interest, to increase the propensity to save of the private individuals. The condition of this is that people can choose among several attractive possibilities of saving and spending. In the national health service and the care for the old it is desirable to provide for several forms of (social) insurance on a voluntary and differentiated basis, with the client's own participation. This can be carried into effect only if the monopoly of the financial institutions currently engaged in such activities is eliminated. In this field, too, such institutions are needed which compete with one another and are interested in income.

An important consequence of these changes may be that the *regulatory role of money* will grow in each field of economic activity, and money can become an attractive means of holding wealth. The accumulation of money capital, and the economically related creation of money are indispensable conditions of creating the liquid resources necessary for a fast and efficient structural transformation. The behaviour of the economic actors has to change so that the lasting maintenance of their financial liquidity present an important constraint on their actions. Transformation of the banking system is a necessary but not sufficient condition of being able to speak in the future not of money supply to the economy, but of financial management, which means that *the monetary processes cease to serve the natural (physical) processes and become instead the primary determinants of economic action.*

If we wish to transform the banking system in conformity with the above-mentioned objectives, this transformation infers an increased role of commodity relations and the market, while contributing itself also to this end. In setting forth the actual methods of further development of the banking system, we shall rely on this principle.

Our suggestions are directly and primarily concerned only with the financial (monetary and fiscal) system, while they infer a further development on market considerations also of the price and income regulation system, the institutional ECMS, and the enterprise organizational system, as outlined in the recently proposed conceptions.

Relationship between planning, the state budget, the banking system and enterprise management

For increasing the role of market competition undertaken on equal conditions under commodity and money relations the most important element is *separation* of the sphere of economic and financial institutions from that of the system of the institutions of state administration. Failing this, the development of a profitability-orientated management is inconceivable either in enterprises or in banking institutions. The economic approach cannot gain ground anywhere, if the super- and subordinations of administrative and authoritarian nature not primarily motivated by profit are not separated from the proprietary-economic relations determined by efforts at a maximum increase of monetary wealth. For this purpose, the hierarchical dependence between credit granting, the budget, and enterprise economy—as asserted in today's practice of the planned economy—has to be replaced by a *horizontal system of relations,* in which these spheres of the economy would be separated as subsystems functioning according to *independent internal operational rules.* After elimination of the hierarchical dependence, the three spheres would be coordinated as partners. For an optimum functioning of the economy, *an equilibrium of these "countervailing powers"* is needed.

From the aspect of the system of financial institutions all this means first of all that the monetary policy has to be enabled to efficiently check on the plan assessing the development of the external and internal socio-economic conditions already in the process of its being drawn up.* Such conditions have to be developed, which do not just enable, but also enforce that *the financial institutions assume responsibility for the formulation of monetary and credit policy,* as well as for the consequences of their practical decisions. The first step on this way is, in our opinion, not the establishment of a two-level system. This would make sense only if, first, the National Bank of Hungary, or, the entire banking system stopped to be an institution one-sidedly dependent on government measures and became a partner of the government enjoying equal rights. We hold this latter step to be the most important and primary one—the basic condition of any real change.

This "emancipation" of the banking system can be carried into effect in different ways. One possible solution is that the president of the National Bank of Hungary should be a member of the governement, in the same rank as the president of the National Planning Office and the person in charge of the budgetary policy. The president of the National Bank would be obliged to execute all government instructions which are in conformity with the guiding principles earlier accepted by Parliament. The director of the monetary policy could execute government instructions beyond this; however, he would have to put in his veto in every case in which their execution would jeopordize the carrying out of the financial policy decisions approved by Parliament.

*The difficulties of coordinating the various plans with the monetary processes are analyzed in [36].

Another way would be to make the National Bank of Hungary independent of the government, its president to be elected directly by Parliament. The president of the National Bank would not be a member of the government, and would only be responsible to Parliament. The National Bank would be authorized to develop its monetary policy, in which it would be guided first of all by its interest in maintaining the macro-level financial equilibrium. The National Bank would strengthen its regulation of the volume of money in circulation. The National Bank would shape its credit policy in consideration of the *macro-level equilibrium and liquidity requirements;* its scope of movement would not be narrowed down by any sectoral quota impairing the role of money as universal equivalent, and demand for budgetary financing of a natural (physical) motivation, or any extra-economic interest.

The fields of monetary and fiscal decisions have to be most definitely *separated,* and both must be given much more *publicity* than is the case today. In the connexion of the two spehres the most important thing is the extent and method of satisfying demands for credit from the budget.* This is to be regulated in a way that in both fields independent responsibility should be assumed, while also the possibility of a flexible adjustment to changing economic and financial conditions should be ensured. Therefore, on the one hand, Parliament has to decide every year on the maximum percentage of the GDP and/or the budget and/or the (budgetary) investments up to which the National Bank of Hungary is obliged to grant credit automatically to the budget. On the other hand, the budget might be granted more credit, if it can issue such bonds through the banking system, which the income-holders buy *voluntarily.*

The best result of such arrangement might be (beyond usefully hardening the "budget constraint" of the treasury) that the responsibility of the National Bank of Hungary for the monetary policy becomes unambiguous. Under such circumstances, the National Bank can indeed assume responsibility for the development of the total volume of money in circulation (but at least for the M1), for the national credit balance, the macro-level financial equilibrium, the exchange rate policy and, to a considerable extent, also for the changes in the purchasing power of the forint. The argument may be advanced against this conception that such independence is not enjoyed by the banking system even in market economies. For example, the central bank is subject to government control also in the Western countries. [37] Apart from not intending to recommend taking over anything that is bad (also) in the West, we have to take the act into consideration that although, formally, the monetary sphere is strongly dependent on the fiscal sphere in many places, the extension of the latter is limited by sociological constraints, much more important than the legal framework [15], [23].

*This demand for credit is widely interpreted: it includes the financing of investment projects implemented with state loan.

Relationship between the spheres of the issuing bank and of the credit bank

Separation of the monetary from the fiscal sphere and their connexion as subsystems may provide reason also for the institutional separation of the issuing and the credit spheres of the bank. At the beginning, what is really necessary is not the establishment of independent commercial banks, though, in the long run, this is also an objective to be achieved. As an initial step, two sections ought to be set up within the National Bank: an issuing bank section and a credit bank section.

The issuing bank section

– holds the monopoly of bank note issue and bears primary responsibility for the development of the monetary policy as laid down in the plans approved by Parliament, and first of all for the changes in the purchasing power of money,

– regulates the credit, currency, and foreign exchange transactions in connexion with the foreign economic relations,*

– controls other monetary institutions through indirect–and, if necessary, direct (administrative)–means, credits and refinances the budget,

– coordinates the activities of the credit bank section and of the independent banking institutions, as well as the security (bond) issues of the various economic actors.

The credit bank section

– provides for a flexible money supply by granting mainly short-term credits (which the issuing bank section can refinance asserting its own considerations),

– grants medium- and long-term credit for enterprise investments based on profitability, and finances circulating assets,

– executes the issue of securities initiated by enterprises, the budget, and public institutions and subscribes to securities (bonds), observing at all times its liquidity.

The institution of the credit monopoly already only formally existing, should be abolished. Thus credit granting can turn from the financial means of government control into an element of market processes and a tool of influencing the market.**

*This is not to say, however, that all currency and foreign exchange transactions should be carried out exclusively by the issuing bank section. Carrying on the practice of the last years, it would be useful if foreign exchange transactions could be made, on commission, by an increasing number of other financial institutes. Such development is also conceivable which would result in that a few banks can carry on active as well as passive operations in foreign exchange.

**We agree with Tamás *Bauer* in that the credit monopoly corresponded to the nature of the directive planning system, while it is alien to the regulated market economy. [38]

Resources of the credit bank section:

- "own" funds granted by the issuing bank section,
- credits of the issuing bank section,
- deposits of income-holders
- own bond issues.

The connexion between the two levels of the banking system is determined primarily by the division of labour within the credit (commercial) banking section. There are, theoretically, several kinds of solution:

- only one credit bank functions beside the central bank;
- credit (commercial) banks specialize according to the sectors and branches of national economy [39];
- credit banks separate on a regional basis;
- credit banks have a general authorization, customers can turn to any one of them.

The solution mentioned in the first place can bring about only a formal transformation–with such organization of the banking system the critical remarks made in the introduction would remain valid. In the second and third cases the monopolistic position of the banks towards the enterprises would be maintained. And this would lead to the survival of the administrative bargaining and fail to enforce a credit granting asserting profitability requirements and the reallocation of resources.

The two-level reorganization of the banking system does not yet render the system flexible. This is proved, among other things, by the cases of the GDR, Poland, Romania, and Bulgaria.* (In these countries a two-level system formally existed in certain periods of development.)

It seems that the two-level banking system would be a real progress in comparison with today's one-level system only if *credit banks competing with one another, that is, holding general authorization* are established. This transformation can bring about a real change only if the conditions of competition among the credit banks can be created, too. However, we must have realistic conceptions of the fields and forms in which a competition among banks may evolve. For example, as for the rates of interest, it can be expected that the efforts of banks at creating a collective monopoly will have an influence towards unifying the basic rents. [40] It is, however, well known that competition does not stop within the monopoly, either, but assumes a different form. In accordance with the individual character of the relations between banks and enterprises, and because of differences in judging the risks involved in each action, there may be a few fine differences among the competing banks in the interest rates mainly on credits, and partly also on deposits. It is even more important that in the volume and development dynamics of the total income of banks there may be considerable differences, owing to fluctuations in their market shares and to differences in structure, variety and in the standards of the banking services. In this situation the banks are compelled to compete

*These cases support again the fact that the nature of economic control and management system basically determines the contents of the functioning of the financial institutional system.

for clients. This is, in our opinion, *the only efficient way to eliminate the one-sided dependence of enterprises on banks as authorities.* A further condition of this is that the income-holders *can choose* among the banks in depositing their money as well as in raising loans. This might mean in practice that an enterprise can be in contact with several banks at the same time. Already the possibility of a choice may encourage and compel the banks to keep their customers, that is, to take into consideration the demands raised and to provide better services.

In this connexion, it may be assumed that the system of incentives of banks will change. The banks functioning on the basis of actual profit motive will be forced to observe, and make observe the mutually undertaken obligations. Under such circumstances the banks can recover their claims by asserting their right of pledge, or they may prolong the term of repayment by setting strict conditions.

The unambiguous assumption of responsibility and risk on the part of banks necessarily involves the bearing of consequences of possible losses or, in extreme cases, of bankruptcy. A guaranty has to be established institutionally that in such cases, similarly to international practice, the holders of small deposits be fully compensated, and the holders of larger deposits in part.

The professional control in the connexion between the issuing bank section and the credit bank section clearly means a super- and subordination relationship. At the same time, this *control has to be exercised basically through banking instruments.* Under such circumstances, the issuing bank can control the credit banks by prescribing the compulsory reserve ratio and/or the gearing ratio,* regulating the interest rate policy, discounting various securities, direct credit granting, or perhaps stating credit ceilings, etc. The appointment of the managing directors of the institutes of the credit bank section is an important question; only so much is clear as yet that the employer's rights are not to be asserted towards them either by the president of the National Bank of Hungary, or the heads of the institutional system of state administration. It is an organization of a joint stock company or a self-governing body, or a kind of combination of these that we consider a more of less consistent solution, but a real decision in this matter can be made and will be worth making only if the economic sphere is further developed in a similar spirit.

It is only a transitory solution to divide the National Bank into two sections, but it can serve as a starting-point for the establishment of a real two-level banking system. If, namely, the conditions that determine the functioning of the whole of economy are going to change (and considerably) in the direction of a consistent assertion of the market mechanism in the coming years, then, parallelly, the development of the institutes of the credit bank section into independent commercial and credit banks may be a realistic alternative.

*The gearing ratio prescribes the maximum of the main total of the balance of the bank in comparison with the share capital. [15]

In the transitory period, the starting-point of changes might be if the sectoral credit divisions of the National Bank were authorized to carry on active as well as passive operations *also beyond the sectoral (branch) limits.* And the enterprises must obtain the right to establish business relations with the various divisions independent of their sectoral (branch) classification. Further, this solution infers that the system of credit quotas existing in the internal practice of the bank is abolished. This can be carried into effect only gradually, since it takes time to approximate the deviating deposit/credit proportions of the different sectors and to turn the rates of interest now different in each sector into a uniform basic interest rate.

If the credit divisions extend their activities to fields outside their sector and are separated both in organization and in accounting, it will become possible to create profit incentive even at the level of each bank official.

If the relations between enterprises and banks become multichannel ones, this will make it even more justified that the issuing bank section should also function as a national clearing centre. Its technical background seems to be ensured by using the available computers.

In addition to dividing the National Bank into two sections, *it is by all means necessary already in the short run to establish such independent financial institutes* which carry out, on a purely business basis, special operations: for example, they grant credit on small investments with a fast rate of return, undertake some of the duties of basic research and enterprise foundation, conclude leasing contracts, etc. Such banking institutions are present in the bud, but it would be important, firstly, to create their *independence* in respect of organization, incentive and operation, secondly, *new ones* ought to be established, and thirdly, the way ought to be opened for *any income-holder to establish* such. If such banking institutions are founded mainly from individual resources, they can assume the form of the well known limited partnerships (deposit companies). These funds may acquire their resources from the issuing bank and credit bank sections of the National Bank, from enterprises as well as from individuals.

The best way of acquiring resources is the issuing of securities/bonds. This kind of acquiring resources provides for a sufficient interest on the part of the investors, as well as for a sharing of risks and it enables the income-holders to maintain their liquidity by selling their share in the capital.

In these small institutes a limited but direct *financial incentive* could be asserted with the executives and the latter could have a right of veto in the appointment of their general manager.

From the aspect of the future establishment of a real two-level banking system it is of an importance not to be underestimated that in these new types of financial institutes *a new set of banking specialists* of an enterprising spirit may appear, at a low risk.

Although this does not belong directly to the transformation of the banking system, in view of its adequate functioning it is by all means necessary to establish such *agencies* which would deal with the reorganization of economic units that have failed, and with selling or letting some of their assets. The functioning of these agencies infers the

creation of a new credit and money stock necessary for the reallocation of resources. Since this money stock does not create any considerable additional demand on the market of commodities and services, its inflationary effect is negligible.

From the aspect of the entire banking system, the transformation of the investment financing activities of the fiscal sphere is of a fundamental importance. *To this end, the projects to be financed on a profitability basis have to be separated from those financed on other basis.* (This separation is not the same as the separation of the competitive from the non-competitive sector, since there are quite a number of projects which, by their nature, cannot be part of the competitive sector in Hungary, while profitable returns might justly be expected from them. Such are, for example, the development of the telephone network, and some of the public utility services.) Those central investment projects in which positive externalities can by no means be charged as costs to the users (national health, service, education, environmental protection, a few cultural fields, etc.) would be financed by an independent, non-profit-oriented "National Development Institute". In all other fields, in which the state is the initiator, or wishes to take part in investment, it can place own capital at the disposal of the entrepreneurs. The granting of the capital can be in the form of stocks. In such a case the state may later on sell its share of the capital if it wants to and if it is possible. The allocation of state capital–if it is not the exclusive source of the investment project–*cannot impose any obligation* on any other income-holder taking part in the project. If the banks find better possibilities of credit granting, they are not obliged to grant credit even for such investment in which the enterprise's "own" share comes from a government allocation of capital. On the other hand, the enterprises cannot be obliged to contribute from their own resources to such investment projects initiated with government allocation of capital, which they do not find advantageous. The above outlined capital allocation activity would be carried on by a profit-oriented "State Capital Allocation Institute" which would obtain its resources partly from the budget and partly through the issuing of securities (bonds).

The central investment projects may undoubtedly have such a third sector in which–though a demand of returns (pay-off) can be raised on the investment–various government supports are granted, upon economic policy considerations. Such supports can be granted in the form of reduced rate of interests and tax-rebates; government guarantee, advantageous terms of repayment, etc. For the handling of all these supports, a "State Supporting Fund" ought to be established, which would obtain its resources expressly from the budget. This institute might play an important role also in the financing of investment projects arising from international commitments.

An inseparable part of the general transformation of the banking system would include by all means a modification of the nature of *the banking institutions in direct contact with the population,* planned in three versions.

The existence of the credit bank section *holding a universal authorization to banking activities*–though not necessarily exercising them–or, that of the institutes, commercial banks, funds, agencies, etc. to be established later on would in itself abolish the monopolistic situation enjoyed at present by the National Savings Bank.

In addition to this, however, a direct transformation and decentralization of the inner structure of the National Savings Bank would help to break the present monopoly. Two ways could lead to establishing an independent and responsible "banking system for private customers", offering varied and attractive services, and taking risks.

With the existing constructions the right and responsibility of an independent business policy ought to be given, in the beginning, perhaps only to the savings cooperatives and to the units of the National Savings Bank which wish to function independently. (The units of both types of banks for private customers would pay, in the initial, transitory period, a rent–undertaken through tender–to the centre of the National Savings Bank. Should they run into losses, the state would undertake compensation of the clients, that is, it would warrant for the deposits.) After this transitory period, however, all the banking houses detached from the National Savings Bank would be ranked together with the other normal banking institutions.

After decentralization of the spheres of decision, the establishment of *new forms of saving,* that is, a widening of the scope of active operations, and breaking into new fields will become possible in principle for all units of the National Savings Bank able to function independently.

It is important, too, to *abolish the monopolistic situation of the National Insurance Company.*

In the sphere of insurance, we attribute great importance to the *voluntary, individual and differentiated, so-called complementary social insurance, more correctly,* to the widening or establishment of such kind of insurance. The licensing or supporting of such forms of insurance may entail the following considerable advantages:

– It would become possible for rather wide social strata to ward off, individually, and depending on their income, the negative effects of future unfavourable income trends.

– If such possibilities are opened up, it may be in itself a sufficient reason for a lot of people to strive after higher income and thereby after a higher degree of (financial) independence later on. This will presumably encourage people to make, voluntarily, greater efforts.

– The spreading of the individual and of the differentiated complementary forms of social insurance would lead to a (spontaneous) reduction of the absolute size of income differences, even without introducing progressive income taxes.

– The individual sharing in social insurance is favourable not only for the individual, but for the community as well. This would relieve the budget, already sinking under the burden of social insurance, since it would somewhat ease the pressure for increasing expenses of this kind. (Therefore, in many countries of the world, it is a "better business" for the budget to support individual social insurance schemes than to take the whole thing upon itself.)

Our expectations are especially high in two respects, towards the further development in the above three directions of the system of banking institutions in direct contact with individuals:

1. The futher development would create the possibility for individuals, that is, for consumers–similarly to enterprises or producers–*to choose freely among the different channels of acquiring additional money.*

2. Through competition between banking institutions for deposits i.e. savings we wish to encourage, on the one hand, the *sharing in a social insurance of satisfactory standards* that can be undertaken by the community even today to a diminishing extent, and, on the other hand, a spontaneous increase of the saving propensity of the households, and thereby an increase in the stock of savings, i.e. deposits.

The further development of the system of financial institutions only makes sense if the principles regarding the reform of the whole of the ECMS can be asserted. These imply in the first place, through the accomplishment of money and commodity relations, the unambiguous determination of rights, obligations, and responsibility to be assumed, and their checking. Under such circumstances the further development of the banking system must lead to the establishment of independent and responsible financial policy institutions asserting also the profit incentive. The costs involved are certainly not low; however, they are probably much lower than the losses the Hungarian economy incurs continuously for lack of changes.

References

1. Antal, L.: A pénzügyi tervezés és a szabályozás konfliktusa (Conflict between financial planning and regulation). *Gazdaság,* 1983. 2.
2. Forró, D.: A forgóeszköz-finanszírozás néhány megoldásra váró problémája (A few unsolved problems of financing circulating assets). *Bankszemle,* 1980. 4.
3. Riesz, M.: A bankhitel szerepéről (On the role of the bank credit). *Közgazdasági Szemle,* 1969. 7–8.
4. Bácskai, T.: A gazdaság monetizálása és a monetáris intézményrendszer (Monetization of the economy and the monetary institutional system). Manuscript, 1982.
5. Antal, L. – Bokros, L. – Surányi, Gy.: Az eszközáramlás feltételei (Conditions of the flow of assets [capital]). *Figyelő,* January 6, 1983.
6. Bódy, L.: A hitelpolitika lehetőségei (Perspectives of the credit policy). *Bankszemle,* 1982. 4.
7. Riecke, W.: A lakossági pénzmegtakarításokról (On personal savings). Manuscript. PM Pénzügykutatási Intézet (Financial Research Institute of the Ministry of Finances) 1983.
8. Asztalos, L. – Surányi, Gy.: Egy kísérlet a magyar bankrendszer továbbfejlesztésének felvázolására (An attempt to outline the further development of the Hungarian banking system). Manuscript. PM Pénzügykutatási Intézet. (Financial Research Institute of the Ministry of Finances) 1980.
9. Medgyessy, P.: A fejlesztés és készletezés szervezeti, intézményi rendszere (The organizational and institutional system of development and stock building). *Pénzügyi Szemle,* 1983. 8–9.
10. Riesz, M. (ed.): *A szocialista gazdaság pénzügyei* (The finances of the socialist economy). Tankönyvkiadó, Budapest 1982.
11. Bácskai, T.: A bankrendszer fejlesztésének kérdései hazánkban (Questions regarding the development of the Hungarian banking system). *Pénzügyi Szemle,* 1971. 11.
12. Petschnig, M.: A bank szervezeti rendszerünk kulcspozíciójában (The bank in key position in the Hungarian organizational system). *Pénzügyi Szemle,* 1981. 3.

13. Riesz, M.: Észrevételek a pénzügyi intézményrendszerről folyó vitához (Reflections on the debate on the system of financial institutions). *Társadalmi Szemle,* 1983. 7.
14. Riesz, M.: *Pénzforgalom és hitel* (Money circulation and credit). Tankönyvkiadó, Budapest 1980.
15. Bokros, L. – Surányi, Gy.: Verseny a valóságban. Személyes benyomások az angol bankrendszer működéséről (Competition in reality. Personal impressions about the functioning of the English banking system). *Közgazdasági Szemle,* 1983. 10.
16. Bonin, V.: *Zentralbanken zwischen funktioneller Unabhängigkeit und politischer Autonomie.* Nomos, Baden-Baden 1979.
17. Die währungspolitischen Institutionen und Instrumente in der BRD. *Sonderdrucke der Deutschen Bundesbank.* 1980. 1.
18. Fogaras, I.: *Banküzemtan* (Banking business). Közgazdasági és Jogi Könyvkiadó, Budapest 1980.
19. Gubcsi, L. – Tarafás, I.: A tőkés pénzpolitika elmélete és gyakorlata (Theory and practice of the capitalist financial policy). Dissertation, Budapest 1980.
20. Kaiser, R. H.: *Bundesbankautonomie – Möglichkeiten und Grenzen einer unabhängigen Politik.* R. G. Fischer, Frankfurt 1980.
21. Ключников, И. К.—Торкоровский, В. С.: *Коммерческие банки США.* Изд. Ленинградского университета, Ленинград 1982.
22. Marmoly, J.: Gazdaságstabilizáló intézkedések Franciaországban az 1976–1980 közötti időszakban (Economic stabilization measures in France in the period from 1976 to 1980). *Bankszemle,* 1981. 12.
23. Szajáni, B.: *Fél évszázad egy magasan fejlett monetáris-fiskális rendszer gyakorlatából* (Fifty years in the practice of a highly developed monetary-fiscal system). National Bank of Hungary, Vol. 85 1979.
24. Szentiványi, I.: *A pénzintézetek jogállása* (The legal status of the banking institutions). Akadémiai Kiadó, Budapest 1977.
25. The role of the Bank of England in the money market. *Bank of England Quarterly Bulletin,* March 1982.
26. Why so many banks go belly up. *Time,* August 29, 1983.
27. Hagelmayer, I.: Bankrendszer és feladatai (The banking system and its duties). *Pénzügyi Szemle,* 1969. 2.
28. Kopátsy, S.: A vállalati tevékenység komplex és többéves értékelésének problémái (Questions of evaluating enterprise activity in a complex manner and covering several years). *Pénzügyi Szemle,* 1969. 11.
29. Tardos, M.: Program a gazdaságirányítás és a szervezeti rendszer fejlesztésére (Programme for the development of economic control and management and of the organizational system). *Közgazdasági Szemle,* 1982. 6.
30. Varga, Gy.: Adalékok a vezetés és a vállalkozás kérdéséhez (Contributions to the question of management and enterprise). *Közgazdasági Szemle,* 1973. 5–6.
31. Huszti, E.: Main trends in the development of socialist banking systems and organizations. *Acta Oeconomica,* Vol. 26 (1981), Nos 1–2.
32. Huszti, E. – Szajáni, B.: Néhány gondolat a jegybankpolitika és -rendszer továbbfejlesztéséhez (A few thoughts on the further development of the issuing bank policy and system). *Közgazdasági Szemle,* 1972. 7–8.
33. Bácskai, T.: Hozzászólás az „Észrevételek a pénzügyi intézményrendszerről folyó vitához" (Contribution to the "Reflections on the debate about the system of financial institutions"). *Társadalmi Szemle,* 1983. 7.
34. Bácskai, T. – Várhegyi, É.: Monetization of the Hungarian economy. *Acta Oeconomica,* Vol. 31 (1983), Nos 1–2.
35. Hagelmayer, I.: Nem lenne több hitel (There would be no more credit). An interview. *Heti Világgazdaság,* July 30, 1983.

36. Doros, B.: Vállalati gazdálkodás és pénzügyi helyzet (Enterprise management and financial situation). *Bankszemle,* 1982. 5.
37. Ligeti, S.: A központi bankok önállósága a tőkésországokban (Independence of the central banks in the capitalist countries). *Közgazdasági Szemle,* 1981. 4.
38. Bauer, T.: A hitelmonopóliumról (On the credit monopoly): Manuscript, March 1983.
39. Rott, N.: A pénzügyi intézményrendszer továbbfejlesztése (Further development of the system of financial institutions). *Közgazdasági Szemle,* 1982. 11.
40. Riesz, M.: *Különleges bankismeretek* (Special banking knowledge). Vols I., II., III., Tankönyvkiadó, Budapest 1975.
41. Havas, G.: Public savings and production finance. *Acta Oeconomica,* Vol. 28 (1982), Nos 1–2.

РЕФОРМА И СИСТЕМА ФИНАНСОВЫХ УЧРЕЖДЕНИЙ В ВЕНГРИИ

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Авторы исходят из того, что в рамках развития системы хозяйственного управления необходимо совершенствовать и систему финансовых учреждений. После критических замечаний, связанных с функционированием нынешней банковской системы, авторы делают вывод, что ещё недостаточно выяснена роль финансовой политики в хозяйственном управлении, а права и обязательства определены неоднозначно. Банковская система в целом односторонно подчинена в первую очередь плановым решениям натурального характера и госбюджету. А подчиненность банков в иерархии центрального хозяйственного управления отражается на положении предприятий как зависимость от государственной администрации.

После характеристики основных типов предложений по преобразованию банковской системы авторы излагают свою позицию. Суть её заключается в том, что важнейшим является не создание двухъярусной банковской системы, а обеспечение относительной автономии роли и учреждений монетарной политики. В более длительной перспективе нужно создать и децентрализованную систему соперничающих банков, которая обеспечивает всем собственникам доходов фактическую возможность выбора. На ближайшую перспективу авторы предлагают переходные мероприятия, которые, с одной стороны, учитывают сегодняшние ограничивающие условия, а с другой стороны, способствуют деятельности финансовых учреждений, обоснованной на заинтересованности в доходах.

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THE NEWLY INDEPENDENT ENTERPRISES IN HUNGARY

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In connection with the evolution of the economic reform a process has been taking place in the last 3–4 years in Hungary in the course of which new, smaller and more flexible enterprises are coming about, mostly through the cutting up of earlier too centralized nation-wide large firms or holding companies. In spite of its undoubtedly positive impacts the process entails the conflict of various (enterprise, supervisory authority, group and individual) interests. The authoress examines the nature of these conflicts and the ways for their solution through concrete examples.

In the middle of 1980 a decentralization process–initiated by the government and based on central decisions–started in Hungarian industry in the main sectors of manufacturing and in a few basic services. Far-reaching organizational modernization was carried out in coordination with the reform of sectoral management, the enterprises' inner structure and incentive system, and parallel with establishing new small organizations and extending the more mobile forms of enterprise. Thus, till the 1st January 1984, 220 new organizations were established in industry, in the building industry, and in transport, and 150 small and medium enterprises offering services, mainly through breaking up the horizontal structure of holdings (trusts) and large enterprises, or, by giving independence to plants and workshops. Approximately 480–500 thousand people are employed in the new organizations.

The most considerable changes have taken place in the food processing industry; up to the end of 1982 the tobacco-, wine-, beer-, sugar- and sweets industry, poultry-processing and canned food industry had become decentralized, and on the 1st January 1984 distilling and brewing was broken up into its parts. Thus, together with the agricultural tools and machines trading enterprises, themselves broken up, 79 new enterprises were established in this sector. In the building material industry 18 new enterprises were founded, of the holding companies under the Ministry of Transport the Road Building Trust was wound up already in 1980, and on the 1st January 1984 Volán (engaged in domestic and international passenger transport and goods traffic) was divided into 24 independent enterprises. The decentralization of GELKA (repairs of household electric appliances, radio, television, and tape recorder), AFIT (car repairs), and the organizational modernization of Javszer (housing maintenance and repairs) led to the establishment of servicing enterprises, the majority under the control of local government councils. The Hungarian Coal Mining Trust had been broken up already as part of the first wave of organizational changes. In the engineering and the light industry, however, changes have been fewer than what would have been possible or necessary, yet they

caused more turmoil: up to the end of 1982 21 engineering and 4 clothing industry enterprises had obtained independence, and last year the units of the Csepel Iron- and Metal Works started an independent life.

Organizational changes of epoch-making importance

The extent, as well as the rate of acceleration, of the organizational development make it clear that epoch-making changes are taking place. What does economic policy expect of changes that have been rightly called radical?

First of all: economic clearsightedness. The form of the holding company (trust)–the form of enterprise organization–should not obscure actual efficiency; it should become clear which activity is profitable or loss-making and to what extent. Second: that the organizational centralization of Hungarian manufacturing industry should loosen; the establishment of a structure of enterprises better adapted in size to its duties, that is, the establishment of small and medium organizations is designed to achieve a more reasonable division of labour, better cooperation, and that also the so far neglected tasks of the background industry should be completed. Finally, it is also considered important that independence should expose as many enterprises as possible to the direct effects of the market, so that the flexibility and competitiveness of the entire manufacturing industry should improve.

The three requirements formulated above clearly indicate that what has been, and still is, necessary is not the revision of the large enterprise organization in general. In all the advanced industrial countries it is really efficient large organizations that are the backbones of the economy. The prolonged recession in the Western countries has furthered organizational centralization and the protection of the large industrial organizations in straits for various reasons is guaranteed by the state, both in view of the utilization of the industrial potential in the long term, and for employment policy reasons. (It is true that such decisions to save firms are based on the requirement of strict inner renewal programmes and structural transformation.) Centralization and decentralization take place simultaneously world-wide. These processes, however, take place mainly as a consequence of market effects and to ensure a better utilization of capital, and do not appear as organizational questions.

There are, of course, also specific types of production, which justify the presence of large industrial organizations, and the strengthening of the internal trade integration. Characteristic examples of this are the vehicle industry, energetic engineering, certain branches of electronics, petrochemistry, and metallurgy. It should be added that the "mammoth organizations" functioning in these fields can profit by the advantages latent in the big organization–first of all the concentration of material and intellectual capital–and can make use of their large marketing organization only with the aid of a complementary background industry–the "ring" of partner enterprises competing with one another.

The one-sidedness of the Hungarian industry was due precisely to the fact that either the small and medium organizations able to complete these tasks economically were entirely missing, or they functioned in such a narrow zone as led to the development of reversed monopolies. Thus the large enterprises were forced also to attend to such complementary tasks which led, in a long run, to increasing production costs and the establishment of parallel and unused capacities.

The new organizational forms in themselves can only give scope to, and provide the framework for greater enterprise in the fulfilment of the requirements made on the organizational changes. Who and in which way can make use of the larger scope of movement depends, beside the organizational conditions, largely on the conditions of regulation and incentive, and not least on the skills of the executives of the new organization, and on the achievement of the whole collective. Yet the conditions at the start have a determinant effect on further development. It is, therefore, extremely important, which methods are used in decentralization, to what extent they promote or hinder the further operation of the broken up enterprises, and how much they can do for the social, economic and individual conditions of a real independence.

Though limited in several aspects, the experience of the last three years shows that most of the organizational break-ups and detachments initiated favourable developments. Decentralization brought to the surface ,certain tensions in control, incentive and management, which had been there for long, making them visible, and it created new tensions as well. The subject is discussed among the supreme authorities, the sectoral ministries, and bodies representing various interests.

In the debates in Hungary two extreme positions are found. Some argue that decentralization is the best cure for our economic troubles, and according to others, subjective considerations and campaign-like features have come to dominate lately in this process instead of well-considered decisions. However paradoxical it many seem, the two positions derive from the same roots. The overestimation and one-sided stressing of favourable effects expected from organizational changes are due to delayed measures. And now, in trying to make up for them, the series of measures may inevitably turn into a campaign, which is further strengthened by the direction of organizational modernization (it comes "from above and outside", and is not initiated by the enterprises themselves).

These feelings about decentralization derive, of course, also from the fact that the process can necessarily assert itself through conflicts; it is not only the interests of a group of executives or of enterprises, but also those of sectoral and regional bodies that may clash with the ideas of the supreme authorities. In this sense decentralization has become a special—economic and sociological—battlefield of interests, as well as a measure of the democratic development of control and enterprise management. Therefore, when I try to sum up the early experience of becoming independent, relying on the evaluation of supreme authorities and on the opinion of enterprises, I wish to give an inkling not only of this most important economic move, but also of the clashing interests, power relations, the questionable methods of sharing, and the shortcomings of preparations and available information.

Improving economic activity under increasingly difficult conditions

According to the figures of the Ministry of Finances–available only on the organizational changes up to the end of 1982–the majority of the enterprises having obtained independence were units of below-the-average efficiency and of above-the-average wage level. In 1979 they had a much higher share in the total resources of the sectors affected (15.7 percent), than of total output (8.5 percent), and their wage level surpassed the sectoral average by 16 percent. It is characteristic of the reorganized enterprises that they tend to be export-orientated: in 1979 15.5 percent of the total export trade settled in convertible currencies was realized in this sphere.

Output according to accounts grew more dynamically–by 46.5 percent in the decentralized enterprises in 1980–1982–than in the total of the economic units of their sectors, and growth was continuous, in spite of both the external and the internal conditions having grown stricter in the meantime. The majority (about 60 percent) of the enterprises having obtained independence increased their profit further in 1982–at least in the sphere for which comparable figures are available. The difficulties of an economic situation grown more tense, and of adjustment are reflected by the fact that in 1981 three, and in 1982 six newly independent enterprises ran at a loss and, according to preliminary computations on the basis of 1983 business, this sphere will futher increase. Between 1980 and 1982 also the resource-proportional profit of the reorganized enterprises was better than for the total number of enterprises. (For example, it grew from 7.2 to 7.4 percent in 1982 with the decentralized enterprises, while it fell for the total number of enterprises.)

With the exception of food processing industry enterprises most exposed to world economic effects, exports settled in convertible currencies of the newly independent enterprises grew dynamically: by 10.7 percent in 1982 in comparison with the previous year, while the sectoral average showed only a 6.9 percent development.

On the whole, the efficiency and organization of the enterprises granted independence have improved. Their economy has grown more flexible, their product pattern has been changing at an accelerated rate, the sphere and form of their new business relationships have been enlarged, they have been making more rational use of materials and resources and, as far as regulation allows, they experiment with new systems of incentives within the enterprise. On the other hand, great differences exist between the sectors of the manufacturing industry, and enterprise attitude within industrial sectors and within groups of enterprises is more differentiated than it used to be. It is, therefore, worth taking a closer look at the different features characteristic of the various industries.

Similarities and differences between industries

The food processing industry has been most widely affected by the organizational changes; with the exception of the monopolistic organizations of the flour-milling, slaughtering, meat-processing etc. industries–justified from strategic aspects of the Hungarian national economy–practically all horizontal holding companies (trusts) or largescale enterprises have been decentralized. According to both the supreme authorities and the enterprises affected, the de-merger entailed the least organizational, staffing and economic conflicts in the food processing industry.

In this, an important role was played by the fact that, though decentralization was initiated from above in this case as well, the great majority of the enterprises felt themselves prepared for doing business independently. The authority of most of the holding companies was restricted which means that their constituent firms enjoyed a higher degree of independence already earlier, as compared, for example, with similar organizations in the engineering and the building material industry. Independence aspirations have been further strengthened by the fact that in these enterprises separate trading and production organization, and cooperation departments were organized even prior to the decision, due to their regional and trade specialities. Though complaints concerning the shortage of skilled staff are voiced also in the food processing industry, in comparison with others, it is here that the staff indispensable for the greater tasks could be recruited within a short time among men and women either trained by the enterprise itself, or among people who had made a name for themselves in the trade. (It confirms the foregoing that, after the winding up of the holding centres, none of the senior staff had to be put on the unattached list, and no one turned, with grievance regarding employment, to a court of arbitration, or political or trades union authorities.)

A futher factor making the organizational changes of the food industry comparatively smooth was that the decisions had been well prepared and were not prolonged over time. An operative committee was appointed in the Ministry of Food Processing and Agriculture to control the organizational changes; its ideas were coordinated with those of the holding companies (trusts) and of the large enterprises and, of course, also with the executives of the organizations granted independence. That is why even the most delicate question of organizational changes: that of sharing out funds could be settled inside, that is to say, why an agreement on the way of the settlement could be achieved within a comparatively short time with the supreme authorities and the banks. (Which was not the case in the engineering and the building materials industry.)

This is not to say, of course, that there were no controversies concerning funds vital for starting and further pursuing enterprise activity. Those enterprises in the food processing industry the development of which coincided with decentralization found themselves in a more advantageous position from the technical and technological aspects than others. From the economic aspect, however, they were faced with extremely difficult, almost unsurmountable problems. Indeed the capital burdens–the repayment of credits and interests–were not proportioned to the profit of a newly independent

enterprise, but to that of the former organization. The costs of the investments could not be shifted to prices, either.

This recurring trouble of reorganization could be solved in a very short time in the food processing industry. In this, without doubt, a role was played not only by the high social status of the food economy, but also by careful preparation on the part of the Ministry of Food Processing and Agriculture and by their negotiating positions being in some cases better than those of other ministries. Thus the investment credit repayment obligations of the Kaba Sugar Factory, of the Borsod Brewery, and lately—as the distilling industry was also broken up—of Szabadegyháza were rescheduled quickly, and state subsidies were granted to the Western export developing investment project of the Győr Biscuit Works. Due to this, none of the economic units had to suffer a deficiency of funds, or become loss-making, because of the organizational separation.

What is, however, characteristic of the way food processing industry enterprises granted independence do business? In the first one or two years their production and profit suddenly grew. Beside the prospects offered by independence, this is due to a need to prove themselves, as well as to the fact that the food processing industry enterprises could switch over to the rules of agricultural regulation. It has become a general practice to establish novel kinds of market relationships with agrobusinesses and with home and foreign trade organizations. It is characteristic of the entire sector that contracts are made for the end product, which again calls attention to the possibilities of efficiency improvement latent in vertical integration. These include investments shared with producers, as well as the establishment of a marketing network jointly with the retail trade, that is, the development of direct sales. (In this way the wholesale mark-up can be split, which does not only increase supply, but also keeps down prices.)

The dynamic development of the first two years was followed by a slow-down in 1983; both because the enterprises exhausted their easily mobilizable reserves, and because the conditions of sales on the world market grew more difficult, and further, because the drought also set limits to what could be done.

The functioning of the independent food processing enterprises teach us a few lessons which make us think and which can be related also to the other branches of industry. It became clear already in the first year of independence that the initiative of the enterprises and the development of competition were limited by the various coordinating organizations established in place of the holding trusts. This is what happened, for example, when the procurement of sugar beet was arranged on a district basis. Prices being centrally controlled, such constraints could be eased in consideration of the different potentials of the refineries. Voting power based on capital contribution depending on the gross value of output makes it dubious whether the smaller breweries really have a say in decisions taken by the management council of their joint enterprise. The Western exports of wine are handled by the joint enterprise of vineyards. The proceeds of exports appear in the balance sheet report of Hungarovin, therefore, this organization is also the beneficiary of the export subsidies. Although it does share subsidies with producers, the latter do not think this is done in an equitable way.

It is characteristic in general that, not so much for business reasons, but to take the easy way out, or lacking local skilled staff, the independent enterprises try to shift some of their duties to the coordinating organ or joint enterprise. This certainly dampens the market sensitivity of the independent enterprises. It is a characteristic example that, prohibitive orders notwithstanding, in certain regions efforts are made to agree on prices and to divide markets geographically, along a country line. This attitude is ascribable to the absence of an adequate direct economic incentive and of competition, indeed in some cases it meets with approval on the part of the administrative and political agencies of the counties. A strange phenomenon becomes apparent: earlier holding companies (trusts) represented–in an ideal case–the interests of the industry as such and played a kind of interest-mediating role coordinating the national economic interests with the interests of the member enterprises. Lately, however, enterprise interests have appeared as regional interests, that is to say, the regional executives arrogate direct rights of control to themselves–on various considerations–over the activities of the enterprises recently granted independence. This ranges from lobbying for development projects to attempts to mark out procurement districts administratively. In several cases they oppose the processing enterprises concluding deals with agricultural producers outside the county.

In the building materials industry, decentralization has affected a much smaller field than in the food processing industry, though the process does not seem to be finished as yet; the less so as the construction firms (some with a county authority) and the specialized industrial enterprises serving construction have so far been left unaffected, though in this sphere real competition is indeed necessary. On account of a few effects of a general validity, it is nevertheless worth reviewing their experience so far. For a start, it should be mentioned that while only 18 new organizations have been established, their weight within the building materials industry is rather large, 18.2 percent of production, 23 percent of the staff, and more than half of the export trade settled in convertible currency. If one adds that the new enterprises are the most profitable within the building materials industry–profitability moves between 35 and 50 percent–, it becomes apparent that the organizational changes here concern well managed enterprises.

As a consequence of limited investment, and of the increased number of producers in the same line of business obvious competition has developed in their field over the last one or two years. This is true of firms producing ceramics used in building, etc. as well as of building joinery, and market effects are becoming stronger also for glass works, as well as asbestos-cement manufacture. For example, as a result of the decentralization of the Building Joinery Enterprise, the now competing, formerly allied, enterprises have reduced the prices of their old products and accelerated the dévelopment of new lines.

In the building materials industry enterprises having gained independence have increased their profits in the last two years, changes of regulators notwithstanding. Only one enterprise: the Romhány Building Pottery Works has lost its development funds, and several others have had liquidity problems. And one enterprise: the Budapest Porcelain Works had to be rehabilitated financially. This is, however, not the consequence of independence.

As compared to the changes in other fields of the economy, organizational decentralization has affected a rather narrow sphere in the engineering and the light industries. And yet it is precisely in these two industries that considerable changes would be necessary because of the large number of enterprises consisting of whole ranges of establishments located in different places, the large organizations holding monopolies extending over whole trades and industries, and the absence of the complementary background industrial enterprises. It is also clear that the effects of changes are the most controversial in these two fields, and particularly in the engineering industry; the management of the newly independent enterprises has grown to be the most differentiated in these fields. It is also in these two fields that the organizational decisions have given rise to most disputes: resistance to decentralization was the strongest.

With the exception of the Csepel Works which were decentralized following a government decision in the middle of 1983 (which has produced 11 new enterprises), between 1980 and 1982 25 new industrial organizations (four in the light and 21 in the engineering industry) were established. These organizations, mostly of medium dimensions in both fields—with workforce between 500 and 1000—have either been detached from the parent firm or have been established as a result of cutting up large enterprises consisting of several plants. Following the granting of independence, all the economic-technological and production cooperation relationships have been broken between most of the formerly allied enterprises, which clearly shows, not to mention the personal conflicts and controversies concerning status at the time of separation, that these enterprises had not been held together by economic interests, but by an organizational framework.

When it comes to the production pattern of the separated enterprises: the prospects of competition arise only for the light industrial enterprises, first of all in the footwear and the knitwear industries. This is because in their case there are competitive organizations of a similar production pattern within the Hungarian economy. Doing well on the home market, and obtaining foreign clients requires an economic attitude which differs from the earlier one, the acceleration of research and development, and a novel kind of marketing activity. This is seen, for example, in the case of the two independent shoe factories; true, the starting positions differed. The Szigetvár works detached from the Quality Shoe Factory inherited a heavy burden: at the time of separation their American cooperation deal was of low profitability. However, by renewing their relationships, accelerating their research and development, and introducing a new system of incentives of their own they soon succeeded in making their exports more profitable and by a flexible change of products they were also able to improve profitability of exports to socialist countries. The Debrecen Shoe Factory detached from the parent firm at Martfű had a more advantageous starting position. The parent firm did not make it more difficult for them to stand on their own feet, but rather helped them in every respect: by placing at their disposal executives of long experience and good reputation, organizational know-how, a fair share of stocks, etc.

Competition cannot, however be reported, in the case of engineering enterprises which gained independence. This is explained by the fact that most of them had their own special line also in earlier times, and their product pattern is either monocultural, or it covers a narrow field in which no other enterprise is engaged within the country, thus, for them, competition is presented only in occasional imports; or, in the case of exporters, they are faced with the tough competition of foreign firms.

This certainly offers evidence of two facts. First: when, after the winding up of the industrial directorates in the early 1960s, these large-scale enterprises of a horizontal structure were established, what took place was only an organizational centralization, without capital concentration in the technological and intellectual sense. The management of the large enterprises, maintaining the earlier product pattern of various plants, or their limited transformation did not take place according to considerations of capital efficiency, but as a result of personal pressure and lobbying, or, in the case of consumer articles, with reference to the responsibility for supply. That is why no vertical relations–cooperation and rational division of labour–could develop among the units of the large enterprises, and even the flow of capital reallocation reflected the power relations of enterprises gathered under one organizational umbrella rather than their economic and market positions. These relations are clearly exemplified by the differences between the initial position of the separated enterprises, their stocks of fixed assets, wage positions, technological development and market relationships. The second conclusion follows: the break-up of the large horizontal organizations does not automatically bring into existence efficient small and medium enterprises.

The decentralization experiences of engineering enterprises clearly show that the enterprises which had a competitive production pattern already within the large organization did not only keep going after gaining independence, but they could also fast increase their profit, enlarge their exports, and renew their product pattern–since they no longer had to support feeble associated plants. This is demonstrated by the Budapest Telecommunication Engineering Works which first became independent of the Csepel Works, the Sopiana Engineering Works detached from Tungsram, the Budapest Battery Works detached from VBKM (Electric Equipments and Appliances Works), EL-CO (Electric Appliances and Installation Materials), Ganz Electric Switches, Elekthermax and the Bonyhád Enamel Works–earlier members of the VBKM and, finally, the Ganz Electric Meter Works and the Ganz Precision Engineering Works–functioning efficiently together as well as separately. On the other hand, those enterprises which functioned inefficiently, for various reasons, within the large organization, could not achieve any real improvement just by becoming independent.

It is true that changes show in two directions also in the case of this group of enterprises. Some are still of low efficiency, however, they have progressed in comparison with their earlier selves, since they are not pressed, in addition to their own burdens, by those of the large enterprise. Such examples are the Kispest Textile Mill detached from the Cotton Print Works, and the Writing Utensils Factory detached from the Elzett Works. There are other organizations in which obtaining independence has brought to the

surface the fundamental troubles due not only to coexistence within a large enterprise, but also to their own inefficiency.

What conclusions can then be reached concerning the independence so far of engineering and light industry enterprises? The technological standards, wage structure, and export pattern of the majority of the enterprises granted independence gave them a disadvantageous position as compared with the average of their industry, however, judging by the business they did in 1982 the profitability of these 18 enterprises exceeds the industrial average, while six are of a permanently low efficiency. Since last year when the Csepel enterprises of low efficiency became independent, the number of loss-making enterprises, with liquidity problems and lacking funds has been growing. The Sopiana Engineering Works, the Wet and Dry Battery Works, the Csepel Telecommunication Engineering Works, and the Ganz Electric Meter Works have greatly increased their profit over the last two or three years. (211 percent, 179.2 percent, 164.4 percent and 141.9 percent respectively) though they had a difficult start. Profitability has improved significantly fast in the Debrecen Shoe Factory (25.9 percent), in the Sheet Metal Works (22.7 percent) and in Ganz Electric Switches (20.8 percent). The improved efficiency is due mainly to the specific saving of undivided (overhead) costs, increased production, change in the pattern of sales, saving on material and live labour, and the application of new organizational methods. Though the newly independent engineering enterprises were not export- (and especially Western export-) orientated, recently the Ganz Electric Meter Works, Lampart, the Chemical Engineering Works, the Telecommunication Engineering Works, EL-CO, EKA (Factory of Electric Appliances and Materials), VBKM and the Writing Utensils Factory have increased profitable exports to the West.

One the whole, therefore, favourable progress could be registered after decentralization also in the engineering and the light industries. Those of the newly established enterprises had to cope with economic difficulties and financial tensions which had had such troubles earlier as well. An additional positive experience of the reorganization is that problems appear precisely where their roots are, and they are not projected or transferred to a larger organization. That is, progress has been made towards economic honesty.

On the other hand, it is also true that some of the financial and liquidity troubles are not due merely to the present attitude of the enterprises; this holds for the efficient, as well as for the inefficient. The scope of movement of the independent enterprises is limited by increasingly strict foreign market conditions, and changes in the economic regulation.

The sorrows of the separation, or: is just sharing conceivable?

The controversies concerning the division of property and the mode of decentralization have been—and are—the neuralgic and most debatable point of organizational development, in the economic and sociological sense. Though conroversies have been most acute in the engineering industry, this question must not be treated as a mere symptom of discord between a group of enterprises and the controlling authorities. What is involved is more than that: the low efficiency of earlier investment, insufficiently explored channels of capital flow, the effects of informal lobbying and personal connections, and last but not least, low standards of management and decision-making as well as an unsuitable system of incentives. The examination of disputes concerning organizational changes, or the division of property, and the ways of arrangement in case of financial tensions should therefore be examined on the basis of more far-reaching examples.

When organizations were divided it was one of the important considerations, that enterprises granted independence should be viable and that decentralization should create no additional costs for the state, that is, those responsible for the budget had no wish to subsidize the initial steps of independence of the new organizations. This was where the first real conflict was located, that is in judging the initial chances, the equality of changes, and the competitive position. And this is because the changes were not based on the decisions or initiative of the organizations affected, either at the time of the earlier mergers, or now, when the separation took place. Both processes were centrally initiated and, since the enterprises involved are state-owned organizations, it is rightly expected that the state—or the ministry as the owner's representative—should arbitrate in the sharing process.

However, in the prevailing system of control, even though the specialized ministries enjoy ownership rights, they lack the means to exercise them. Therefore, the disputes of the independent enterprises about the sharing of assets, or about the development credit repayment terms making it impossible for enterprises to start their independent functioning (that is concerning the rescheduling of repayment obligations) have been decided by the banks, just about on their own. This has given rise to new tensions, for example in the engineering and the light industries, being in some cases the issue on which the decentralization depended of large enterprises of a type that amounted to a conglomerate of industrial plants.

To put it plainly: organizational separation has been justified for some time from the industrial policy aspect and, in the long run, the division of labour among the independent enterprises could have been more favourably shaped, yet decision was postponed, because, in the short run, decentralization would have made further inroads on the credit resources of the banks.

The conclusion can be drawn from the preceding that the mode and degree of the division of assets, and the shouldering of the burdens of the development projects often

reflect the current power positions of the managers of the given large enterprise and of the regional representatives of the detached or separated enterprises, and not the long-term needs of efficiency. What is more: even in decisions made by the financial institutions and supreme authorities solutions occasionally occur as are rooted, one might say, in an accountant's way of thinking and not those of a "proprietor" interested in the efficiency of capital.

In most cases, the debated issues concerned: who and to what degree should bear the burdens of a development project just beginning to bring in returns; to what extent must the large enterprise and the newly independent enterprises assume responsibility for the repayment of credits on projects initiated collectively, but not equally useful to each of them in the future?

The large enterprises, and the specialized ministries, their representatives in the debates used the argument that the earlier "large collective purse" had not only covered up the differences in economic efficiency of the various units, but (from another angle) it had created the proper conditions for capital reallocation within the large enterprise. It is true that for years resources were concentrated and development possibilities drawn away from a few fields which could have been developed faster than the average thanks to the profit earned there; but the profits earned where the common assets were invested also benefited the other units. That is to say, within the large enterprises a kind of levelling can be demonstrated in investment activity. Thus it was only a question of time, whose turn it was. It follows–so the large enterprises argued–that it is not necessary to examine in the course of the separation, which factory unit contributed and, how much, to that "big common purse" and how much it got back but, simply, the umbilical cord has to be cut and after that they should each make their way as best as they could.

This argument, however, fails for several reasons. First of all because it assumes that in earlier periods the development projects of large enterprises comprising several plants, or the organizational growth of one or another large enterprise–for example by the absorption of small state-owned or cooperative enterprises–were influenced exclusively by technological rationality, that is, by profitable returns on invested capital. And yet what had mattered, in many cases, was in which factory unit there was still available floor space and labour, or the nature of personal contacts between the execution of the given city or town and the supreme authorities or specialized ministries. All this favoured extensive development rather than capital investments promoting a fast modernization of the product pattern.

In the course of the recent organizational separations such a typical debate arose, for example, between Tungsram and the Sopiana Engineering Works of Pécs. Tungsram absorbed Sopiana–a long-established enterprise in Pécs–in the early 1970s, stopped the production of food processing industry equipment on which its independence relied and instead, started developing vacuum technology machine production. The project was delayed, costs grew and, what is more, because of other difficulties Tungsram could not make use of the capacities established at Sopiana. After the separation, the development project costs amounting to more than 200 million forints devolved on Sopiana alone.

And, even though the newly independent enterprise quickly transformed its product pattern, and increased its exports as well as profit, in the first two years of independence it could not accumulate sufficient development funds to repay proportionately the credits taken up by Tungsram. One argument followed another, until at last, after a year had passed, the decision was taken that Tungsram had to be responsible for some of the repayment, and Sopiana's debts were rescheduled by the bank. That it was worth standing up for the new organization is proved by the fact that the factory of Pécs quickly established themselves and the economic success of 1983 indicates that in 1984 it will make a larger repayment than laid down in the credit contract.

Similar debates have been pursued between almost all the newly independent enterprises that had incurred debts because of development projects that had just been completed, and the parent organization, or, among sister enterprises. It is, however, necessary to take a look also at the other side of the coin: the newly independent enterprises left without development projects demanded for themselves a bigger share of the formerly common capital arguing that, because of investment that had not taken place, their initial position in starting a new life is weaker. So far no kind of substantial decision on the division of assets has been taken to overcome their anxieties, and the supreme authorities usually close the debate by saying that this is the price to be paid for independence.

In the course of decentralization of the Industrial Porcelain Works the credit and interest burdens of the Romhány investment–let us add: by the end of the development project the investment costs were the double of the original estimates–were "divided" among the member enterprises, upon the initiative of the supervising ministry. More precisely: at first they protested against this way of dividing assets and liabilities. This is because they had no say in the decision on the investment, however, the modern equipment at Romhány competed with them after the separation. The Ministry of Building and Urban development, however, did not accept this argument and "persuaded" the former sister enterprises to lend to Romhány for the period of the credit repayment, since the enterprise was weighed down by the burdens of development, even though it was technically modernized and used many new and efficient methods in its organization and research and development activity.

However, as a consequence of the deteriorating market situation and the changes in the regulators, the Romhány enterprise still cannot fulfil its payment obligations, and its debts will probably have to be rescheduled. The question is whether this could not have been done right at the start? In that case at least the development of the other industrial porcelain works would not have been hindered with reference to interests of the industry as a whole, and to solidarity within the trade.

The Ministry of Building and Urban Development has learned its lesson. Last year, in the course of decentralizing the Building Joinery Works, the Ministry decided that the newly independent Sopron works should alone carry the burden of the credit repayment obligations arising out of a current investment project.

Of course, no generally valid recipe can be given concerning the division of the

burdens of the development projects started collectively or, what the economically most efficient solution might be, which would also be considered socially fair. So much, however, can be said, without the risks that attend generalization, that the profitability of the invested capital should be the basis of decision.

While, however, the division of assets takes place in many cases as a result of unofficial influence instead of an open and reasonable compromise on economic interests, we shall yet witness quite a number of questionable divisions. Let me mention two examples. In the course of breaking up the VBKM, controversies and hidden conflicts of personal interests broke out concerning the future of the computer centre and the R&D institute. Since they could not agree on a joint operation, which would have been most reasonable, the computer centre became independent and now cannot fully utilize its capacity. The R&D section was transformed into a subsidiary company, which seems to be a better solution. A most interesting example of the peculiar cases produced by life is the case of the Székesfehérvár Heavy Metal Foundry which became independent on the 1st of January 1984. This foundry of high profitability–which had already been independent once, some years ago–now separated from the Csepel Metal Works. As a price of its independence, it had to repay some of the loans financing investments at a third enterprise (the Mór electrode factory), decided on and implemented yet by the Csepel Works Holding Company, which today functions at low levels of efficiency.

Finally, it has to be mentioned that in the course of the organizational decentralizations there are a few enterprises in which difficulties appear on the surface as inequalities in the division of assets while they in fact point to more serious structural tensions. This is most clearly shown by the permanent loss-making of two former Lampart enterprises: the Kecskemét Bath-Tub Works, and the Salgótarján Iron Foundry and Kitchen Range Factory. Last year the government examined both cases and took measures with a view to establishing the conditions necessary for continuous functioning. For the Bath-Tub Works this involves, beside rescheduling credits, a new price rise to form a basis for stable operation. This case calls attention further to the risks involved in granting independence to a monocultural enterprise that cannot be converted to the manufacture of other products (it has to be added, of course, that the manufacture of bath-tubs was loss-making already within the large enterprise organization). It is even more difficult for the authorities to make the Salgótarján enterprise profitable again: in spite of central intervention, losses grew further in 1983, and the executives, seeing the accumulating troubles asked for financial rehabilitation, which they will probably get–in consideration of the position and role of the enterprise in the manufacture of durable consumer goods.

The two above-mentioned cases show that, if it is evident already at the time of granting independence that a new enterprise will be of a permanently low efficiency, not for organizational reasons but as a consequence of the structural and liquidity tensions, and because of management failures, the postponement of financial rehabilitation can only lead to the worsening of the troubles. In addition, the accumulation of tensions provides a sound argument for those who generally oppose independence.

Where progress has been made and what still lies ahead

It is not reasonable at this stage to draw general conclusions from the functioning of the newly independent enterprises, from their results and troubles, since the experience of a year or two does not suffice. The time that has passed is, however, enough to indicate a few characteristic trends and peculiarities in approach. This summary also allows us to discuss the process of organizational development, and the ideas of enterprises concerning further development.

First of all it has to be said that the results of the newly independent enterprises offer clearly evidence of the necessity of decentralization. These measures–that are no more than first steps–have largely contributed to realistic economic control, helping to make it clear, which activity is efficient, and which is loss-making, which methods can bridge the gap between producers and the market, and how, by strengthening direct incentive, the initiative and adaptability of small and large organizations can be increased.

Further, it is obvious that those who made the organizational decisions based themselves mainly on dimensions, and paid less attention to the activities, to the given state of market processes promoting or hindering competition, and to the complementary possibilities for cooperation within the given organizations. Organizational changes took place first of all in the horizontal large enterprises consisting of several plants, while decentralization did not affect vertical enterprises. Nevertheless, the interactions of organization, activity, and the market cannot be neglected. Surely, if any condition of efficiency is lacking, no positive change can be expected in the attitude of the new organization. Similarly, no competition will come about if the units of a large enterprise–each having its own production pattern within an industry or trade–are granted independence. The monopolistic situation does not depend on the dimensions of the enterprise, but on market positions, first of all on relative prices, and changes in demand and supply, and, last but not least, on the economic environment.

This partly accounts for the fact, why–at this stage of organizational developments–a higher number of enterprises have not been founded to look after the tasks of the background industry and to promote a more rational division of labour and cooperation among enterprises. It is not enough for that to change the organizational framework. In order to accelerate the reform process the systems of incentives–first of all the price and wage system–have to be modernized, so that the large vertical organizations, giving up their still prevailing approach of enterprise autarky, should start rationalizing and optimizing their activities–making it worthwhile for them to grant independence to the complementary organizations.

What kinds of–economic and social–resistance on the part of the medium has had to be faced by organizational decisions and which are the lessons taught by the measures taken so far? In interpreting the conflicting effects, it must not be left out of account that the comprehensive organizational changes took place in a period in which the Hungarian economy found itself in a more difficult situation, while economic regulators were changing to an extent and with a frequency unpredictable for the enterprises, and

the domestic as well as the foreign economic environment grew increasingly tough. What is more, the inevitable operative interventions and import restrictions do not favour diversification and a greater division of labour, but rather strengthen the inner centralization of the organizations. These effects which must be considered objective conditions contributed further to the defensive attitude of enterprises, opposing changes.

Of course, the prospect of decentralization gave rise to resistance at least as much for individual and prestige reasons among both the directly and the potentially affected. These factors must not be neglected, or considered as of secondary importance. What is involved is by no means the conservatism of the general managers, or a kind of hostility to reform on their part. What is much more relevant is that there is still no genuine difference between the financial rewards and social recognition received by the manager of a profitable and of a loss-making enterprise; that the managers showing initiative and able and willing to take risks are not sufficiently appreciated, that, even though appointments for a fixed term to advertised positions are becoming more usual, the system of selection and training of executives does not come up to expectations.

In a few cases the newly separated or detached enterprises were driven to resistance by the manner of preparation and execution of the organizational decisions. The organizations affected as I mentioned in presenting the cases of debates over the division of assets–did not make the proprietary and representative interests, or long-term industrial policy aspects, sufficiently evident. In several cases it seemed to them that the arguments between the supreme authorities or the opposing interests of the functional and management apparatuses of a ministry counted more in forming a decision than economic considerations. The implementation of the organizational development principles formulated in generalities was not always preceded by a thorough analysis, and, confronted by conflicts becoming more acute, the decision makers also chose the line of least resistance. And this necessarily strengthened large enterprise and regional interests.

Uncertainty on the part of enterprises was further increased by the prolongation of the preparations for organizational change. (In some of the large enterprises modernization of the organization was taken up once or twice a year, and then decision was postponed.) The business of enterprises was in a few cases outright disorganized by organizational change carried out in several stages.

Finally, organizational development was made more difficult by the fact that enterprises felt that decisions were made about them, yet without them. The factory units due to become independent found it prejudicial that they had not been drawn in the preparation process and that the large enterprises' analyses were alone accepted as the basis of negotiations, which then had an unfavourable influence on their initial positions. All this is a warning: it is worth thinking about to what degree these measures were democratic, or whether, in the case of administrative decisions made outside the enterprise sphere, it makes sense to talk of observing, or demanding the observance of the democratic rules of the game. I think that as far as the preparation of the decisions is concerned, it does. This is one way of concerting interests, and it is socially as well as economically quite feasible. It can be shown, furthermore, that questions of organiza-

tional division and of granting independence cannot be decided merely on the basis of individual motives, subjective resolutions, likes and dislikes, or perhaps by a show of hands. What is involved appears in the form of organizations and persons, but these are, in fact, vital economic interests. It is another question that the mechanism of asserting interests within–and partly outside–the large enterprises has not yet fully developed and that is why, in many cases, the economic units cannot avail themselves of the increased scope of enterprise offered by present economic and legal regulation–that they cannot make use of more modern possibilities for organizational reform.

This is the point which leads us over to the solution of the future organizational problems. Obviously, measures–initiated "from above and outside" and carried out administratively–of the organizational reform started in 1980 were necessary on account of industrial development and regulation interests and last but not least because of the personal and power interests of the various groups of enterprises and of regions, nor can such types of central intervention be excluded for the future, either. Organizational reform is, however, a process based on the recognition of economic interests. It is most efficient if the initiative comes from within the enterprise, that is, if no outside instructions are given for changes, but the enterprises themselves try to find the right organizational form–changing it from time to time–best suited to their duties and development strategy. Such an attitude on the part of enterprises–looking to the future instead of being defensive–can most likely be encouraged and enforced by the comprehensive modernization of the economic control and management, and by the improvement of the system of incentives.

In recent times, encouraging signs of organizational changes started from within have been found precisely in the engineering and the light industries–which have so far appeared to be the most rigid. Several enterprises have expressed their readiness to cooperate with enterprises of a similar production pattern in the form of either economic partnerships, or joint enterprises, with a view to eliminating the shortages of the background industry. Beside the enterprises' own financial contributions, in some cases also innovation funds and small banks promoting technological development would join these undertakings. Subsidiaries are planned bearing in mind background industry and service needs. So far, most of these initiatives have been taken with the industrial development, planning and organizational institutes and enterprises. The establishment of subsidiaries certainly seems to be one of the best ways of organizational modernizations initiated from within. This form of enterprise allows for a high degree of independence to be granted to certain spheres of activity or enterprise sections that can be clearly delimited technologically, while contacts based on mutual interests are not broken, but on the contrary, are intensified. It is upon such considerations that the Duna Ferrous Metallurgical Work reorganized the Lőrinc Rolling Mills as a subsidiary, and that the Csepel Motor Works are also organizing the technical staff ot the R&D section as a subsidiary. The FÉKON Clothing Industrial Enterprise and the Április 4. Engineering Works are also working on interesting ideas.

All this indicates that central efforts at a further modernization of the management and organizational system, in favour of collective management, the strengthening representation of the ownership function and incentives for management are not just "in the air", but that firms of a flexible and enterprising spirit are themselves anxious to be at the head of this process.

ОПЫТ ВЕНГЕРСКИХ ПРЕДПРИЯТИЙ, СТАВШИХ САМОСТОЯТЕЛЬНЫМИ

К. БОШШАНИ

В Венгрии, начиная с 1980 года, происходит процесс организационной децентрализации промышленности и некоторых важных отраслей сферы обслуживания. Этот процесс связан с реформой хозяйственного управления, стремлением к созданию подвижных и гибких малых хозяйственных организаций, способных более эффективно удовлетворять как нужды крупных предприятий, так и населения.

До сих пор этот процесс происходил большей частью путем реорганизации, разукрупнения больших предприятий, трестов, зачастую занимавших монопольные позиции на отечественном рынке. Опыт минувших трех лет свидетельствует о том, что организационное разукрупнение в большинстве случаев вызвало позитивные изменения и эффекты в хозяйственной деятельности предприятий. Вместе с тем процесс децентрализации породил конфликты интересов не только внутри или между предприятиями, но и между отраслевыми или территориальными органами управления. В статье на конкретных примерах рассматривается природа этих конфликтов, их причины и возможные пути их разрешения как в положительном, так и отрицательном направлении.

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SHORTAGE OF COMMODITIES AND PUBLIC OPINION IN HUNGARY

K. Z. FARKAS – J. PATAKI

The authoresses evaluate a public opinion poll to establish to what extent the supply of consumer articles is characterized by one of the central problems of socialist economy, i.e., the shortage of commodities. According to the survey there are chronic disturbances in commodity supply and this affects the whole population. The primary concern is quantitative shortage, but, with economic development also the shortcomings related to the narrow range of choice obtain ever greater importance.

In spring 1981 a public opinion poll was made among the adult population, and the primary concern of the investigation was to learn the opinion of *those interviewed about the* supply of commodities.* We deemed, however, inevitable to deal also with the perception of the measure of commodity shortage sharing János *Kornai's* view, according to which shortage is one of the central issues of socialist economy.

Though during the time passed since the poll had been made certain concrete aspects of the answers lost their topicality, some conclusions may also be drawn from the answers which hardly lost their validity.

According to the results of the investigations people have the everyday experience that disturbances in the supply with commodities are chronic; the shortage of commodities is a serious problem of supply affecting the entire population.

Attention should be drawn to the limits of the analysis resulting from the fact that opinions and not the phenomenon itself were examined. We think, however, that in connection with shortage not only objective data–hardly measurable at present, yet–may be of importance, but also feelings and judgements of people of the real situation.

The extent of shortage

We do not undertake to decide whether the shortage of commodities as perceived by the population should be qualified as serious or insignificant, big or small. A shortage should be considered as serious and of considerable extent if there is a permanent

*The poll was made by the Mass Communication Research Centre. 1000 persons representing the adult population of Hungary were interviewed; the number of questions to be asked was strongly limited. Due to these circumstances we could not collect data on demand and consumption habits characteristic of individuals or families and even divergences of opinions could only be analyzed related to bigger social *strata* and groups.

quantitative excess demand for almost all consumer goods and allocation has to be regulated in an administrative way, while it may be regarded as insignificant when excess demand arises only sporadically and temporarily during short periods. Commodity supply in Hungary is placed between these two poles. However, certain starting points may be determined as to whether shortage is a *generally* characteristic feature of supply or not. Shortage is considered as a general phenomenon if it can be observed with the overwhelming majority of consumer articles and if within the various groups of articles it occurs not only in the case of a few articles. The results of our investigation indicate that shortage is general in commodity supply in Hungary.

In what respect is supply bad?

Fourteen groups of articles were selected covering a considerable part of the consumption by the population. One of the most frequently mentioned complaints was that some definite article simply cannot be bought. This phenomenon could be found in almost every group of articles with remarkable frequency. *Uneven supply,* quantitative disproportions between demand and supply to be observed at various dates were also very often mentioned with great emphasis by those interviewed. Objections of both types indicate a *quantitative shortage:* articles demanded by buyers were not available. Distinction between the two types of quantitative shortage may not be attributed first of all to the different reasons for the shortage. People do not know exactly whether a commodity is not available in a shop because of the lack of a manufacturer, basic material, capacity bottleneck or, although the product in question is manufactured in adequate quantity, but for transportation, distribution or commercial policy reasons it is regularly not delivered in due time and/or in adequate quantity to the consumers, etc. When making a distinction between these two types of quantitative shortage *the intensity and frequency of the shortage actually experienced* have also a part beside inexact knowledge of the causes of shortage. When people stated that something was missing, not available in shops, their answers indicated frustration over their failed purchasing attempts. When others said about the same article that it was rarely to be had or there were only a few in stock, from this the conclusion can be drawn that the intensity and/or frequency of frustration was smaller with this group than with the aforementioned group. (Characteristic formulations of quantitative shortages perceived with varying intensity are reflected by the following answers: "children's socks are not always available"; "there is no cement available–little cement is delivered", etc.).

It also turned out that people do not complain about the lack of such articles which are not at all available in Hungary, but–remaining on the ground of realities–only about that of such ones which do exist and are available in principle and can (could) be purchased. As it is aptly expressed in a saying the problem is the following: "Everything is available, just not always, not everywhere and not to everyone."

Supply and demand are mutually influencing each other. Until a commodity is not to be obtained at all or only to a limited extent, it will not be formulated as a general and fundamental requirement that even several variants of an article be available. However, if supply exceeds this basic level, requirements will be higher, too. It is no longer sufficient that a commodity is available, but it will be of importance, too, whether there is an assortment, a range of choice within a group of commodities serving for similar purposes and whether the consumer may find the one best corresponding to his own ideas, possibilities and taste. Over and beyond problems resulting from quantitative shortage those interviewed often complained also of a shortage of assortment. When mentioning the shortage of assortment no luxurious demands were formulated, but consumers objected to monotony and uniformity which indicates the "underdevelopment" of a "more developed" supply.

Those interviewed mentioned *poor quality* and–in some cases–the lack of cheaper products in connection with relatively many articles. It follows from all this that basic supply problems characteristic of certain groups of articles are not specific ones attached to particular commodities, do not follow from the individual physical characteristics of commodities, but are *general.* Of course, also specific problems characterizing given commodities were met, but the weight of such problems lagged far behind that of general sources of disturbances. Such specific qualitative objections characterizing certain products were the following: shoes are uncomfortable; vegetables and fruits are shrunken or spoiled by the time they get to the consumer; clothing articles are not fashionable; with fuel purchases transportation is always a problem, etc.

Supply problems perceived by the population were divided into two big categories–quantitative and qualitative problems–with each group of products examined in order to obtain a more comprehensive picture about difficulties connected with commodity supply. We wished to know first of all whether within the general supply problems those of qualitative or quantitative nature are more characteristic in the whole of commodity supply. (The lack of choice (assortment problem) was ranked among qualitative problems, namely with the aim that the group comprising quantitative problems of supply should only include shortages of really quantitative character, i.e. only those cases when the "number of pieces" of articles on the market is not enough.)

As regards commodity supply as a whole, the conclusions may be drawn that in the opinion of people *the major problem is quantitative shortage.* For the illustration of this statement a simple dominance indicator* was computed for each group of articles and by means of the figures obtained in this way various commodities were placed along a vertical axis. It may be seen from the following figure that in the field "quantitative dominance" more groups of articles can be found than in that of "qualitative dominance"

*Dominance values were computed by deducting the percentage rates of quantitative problems from those of qualitative ones and the difference obtained was plotted. A positive sign indicates the dominance of qualitative, while a negative one that of quantitative problems. The sign in this case has only a formal meaning without indicating contents.

and the average measure of dominance is also greater in the former. If, deviating from our original classification the lack of choice were ranked also within the category of quantitative shortage (which could also be justified, since after all this means that the original purchasing intention could either not be realized at all or a forced substitution took place) the overall picture would be even more unfavourable and the dominance of quantitative shortage would appear even more characteristically.

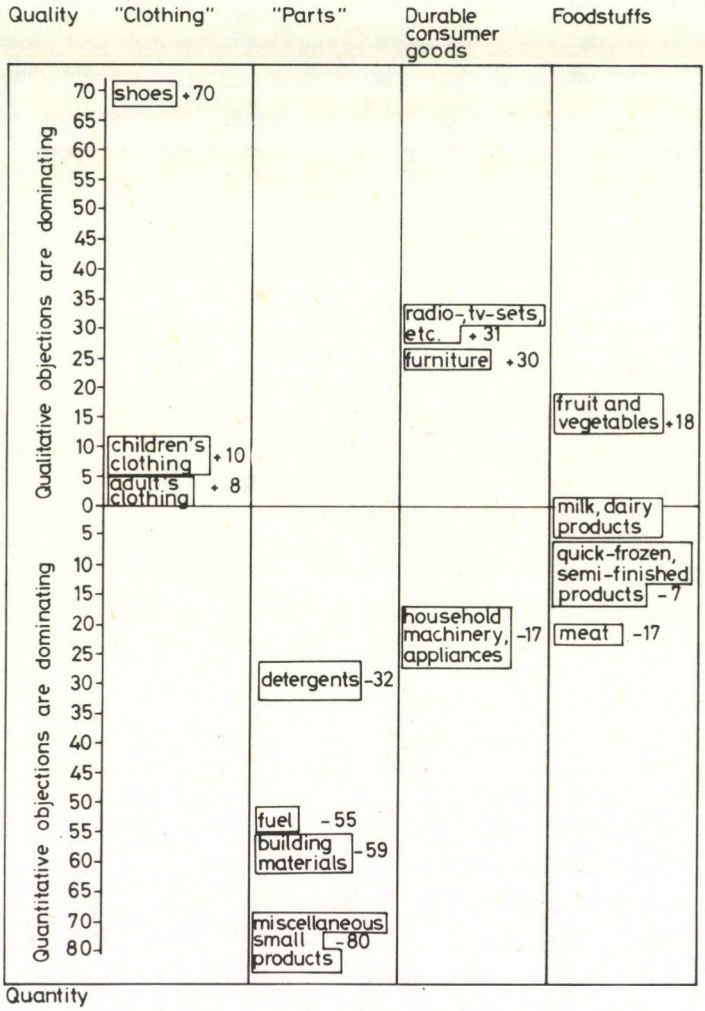

Fig. 1

Dominance indicators of various forms of shortage in major groups of articles

In spring 1982 opinions formed about supply were newly examined. In the case of certain products considerable changes took place; in general the supply with consumer goods was judged better than a year earlier. However, the structure of problems raised in connection with supply did not change, i.e. disequilibrium between demand and supply continued to appear in the form of quantitative shortage.

Situations indicating the measure of shortage

The spreading of shortage may be concluded from certain purchasing situations, too. By analyzing these situations we may simultaneously also get nearer to palpable experiences. If shortage is not a general phenomenon, then it may not be typical that a purchasing attempt partly or fully fails and thus there is no need for "special" mechanisms of acquiring certain commodities (connections, tips, etc.) to become general, either. Just as we are unable to determine the measure of shortage exactly, we cannot undertake to judge, either, whether failure is a common experience of many people or not. However, our experience from previous researches supports the view that the ratio of those reporting on negative experience resulting from commodity shortage is considerable.

Most concern and anger are caused by the fact that some commodity may not be obtained at all. Then a purchaser is faced with the serious problem of what to do. It may be considered as a somewhat less serious case if purchasing a commodity requires a lot of inquiries, time and energy. How long somebody is willing to go from shop to shop in order to obtain something depends on the place of the commodity in individual consumption, on the one hand, as well as by the urgency and topicality of the purchase, furthermore, by personal willingness on the other hand. There are some people who immediately give up their purchasing intention after the first failure, while some others are sacrificing even several months to look for certain goods. 36 percent of people reported on having looked for something needed in vain during the previous year, while 58 percent on having obtained certain goods only after long inquiries and searching. On the basis of the latter figure it seems, therefore, more frequent that a certain commodity may sooner or later be actually obtained. *It may be unambiguously stated, however, that simple successful purchases requiring little energy and time are not typical in Hungary.* Among articles obtained not at all or only after long searching and inquiries almost all kinds of consumer goods may be found.

Difficulties of commodity purchase are producing several negative social phenomena. Tipping and making use of personal connections are perhaps the most negative consequences of deficiencies in commodity supply. Buyers and sellers are mutually participating in the maintenance and extension of this system. The shortage of commodities creates situations where everybody gets corrupted.*

*In his study on corruption [1] Elemér *Hankiss* has drawn the conclusion, too, that the reason

27 percent of those interviewed mentioned that it had occurred during a year preceding the investigation that they had obtained the commodity required only "from under the counter". It is difficult to decide whether this is a large or a small figure, or whether buyers were sincere or not. This figure indicates, however, anyway that tipping and making use of personal connections have become by now a socially accepted and "adopted" mechanism of acquiring various commodities and are less and less regarded as immoral.

We were astonished to experience the range of articles buyers are willing (or forced) to give tips for or make use of personal connections to acquire. Beside articles to be obtained from under the counter already "traditionally", fresh meat and bread, wall-plug, door-lock, wire and strap, knitting thread, slippers and several other commodities of similar importance were mentioned in the answers, which, again, indicates the shortage of commodities of all kinds.

Some remarks should be added to the above. Our questions referring to concrete experiences could not be exactly delimited in time. We do not know whether an answer referred to situations on the previous day or months earlier, nor whether it indicated an occasional event or a permanent situation. There are no data available on the extent to which people are affected by these events. Nevertheless, all these questions may be answered indirectly, even if with limited validity. It is probable that cases mentioned were very recent or occurred frequently, or caused especially serious problems, and therefore affected those interviewed very sensitively. Under normal circumstances we would not remember everyday purchases of insignificant volume and value, since they belong to routine activities. However, the majority of the articles mentioned above belongs precisely to such routine purchases, let us only think of the articles mentioned as bought "from under the counter". The mere fact that those interviewed remembered these routine purchases means in itself that something extraordinary accompanied the habitual event. They could exactly enumerate these cases with all probability because failure to obtain something, looking for connections or the rite of tipping caused the frustration.

Shortage and "shortage articles"

Shortage, "shortage articles", "manufacturing of shortage articles" are familiar expressions in Hungary not only in the vocabulary of economists, but also in everyday common language. Sellers and buyers are willing to call anything a "shortage article" which is just not available in shops.

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for corruption is shortage. Though the interpretation of shortage is not limited to material goods with Hankiss, the sociologist mentions the shortage of goods and services among the first problems when investigating the reasons for corruption. Resulting from the formulation applied in our investigations we do not know how purchasing "from under the counter" may be qualified in certain cases according to the several forms of corruption, but we suppose on the basis of our knowledge that in most cases we are faced with tipping.

In the course of our investigations we made an attempt to determine to what extent the shortage phenomenon is built in into common knowledge. We distinguished between lasting and temporary shortages, but it turned out in the course of the analysis that this distinction could not be verified by everyday experience. Namely, the basic situation–something we would like to buy is not available–is identical in both cases. Defining these two notions, i.e. when a shortage phenomenon may be regarded temporary or lasting, is not simple even in theory. Some distinction was, of course, made by those interviewed, too: among lasting "shortage articles" such items were mentioned, too.–e.g. veal–which really had not been available in shops for years. However, it often occurred that a product was mentioned both among the lasting and the temporary "shortage articles". In our opinion one of the most important reasons for the merger of temporary and lasting shortage is the *subjective experience of the phenomenon of shortage.* Namely, if the lack of a given commodity caused serious trouble and frustration to somebody, then this person judged this shortage phenomenon more serious and lasting, while he who was not seriously affected by the lack of the same commodity qualified this phenomenon only as temporary.

According to 57 percent of those interviewed there are commodities which are occasionally available and occasionally are not, while in the opinion of 25 percent there are also such ones which have been missing from shops for years. When asking about commodities qualified as lasting or temporary shortage articles, respectively, we did not have the intention to obtain a "complete list of shortage articles", but merely asked for some examples. *The examples mentioned unambiguously prove the "overall presence" of shortage, since there was no commodity group left unmentioned when enumerating examples.*

When analyzing our questions referring to shortage it was surprising that articles in which a considerable shortage is well-known–e.g. cars–were mentioned only very rarely. The explanation for this is the following: people have already got used to the fact that certain goods may only be acquired through special mechanisms deviating from the "normal" act of purchase, with queuing for many years and engaging large amounts of money, etc. They are so much accustomed to these, that questions referring to shortages did not "recall" their "experiences" connected with such kinds of consumer goods. We think that these commodities have already (partially) lost their commodity character in the everyday sense of the word and are judged by consumers otherwise than the majority of consumer goods.

Accommodation to shortage

If there is an equilibrium between demand and supply, buyers will always find the corresponding goods and their purchasing intention will be realized. If, however, existing demand cannot be met with adequate supply, purchase efforts often fail and excess demand appears. This situation needs decisionmaking on the part of consumers.*

What to do?

Consumers are forced to choose between queuing, waiting and forced substitution, respectively. "The buyer's propensity to queue, to make forced substitution and indeed any other component of his attitude, may fluctuate from moment to moment. If, however, we observe many buyers making repeated purchases on many occasions, we can identify definite stochastic behavioral rules... Or at least we may state the average behavioral characteristic over some longer period for different subpopulation of buyers."[2]

We put our question referring to the way of accommodation to shortage on one occasion, but to 1000 persons. The question was deliberately formulated so as to obtain a picture about the purchasing strategy characteristics for a longer period.

The most important feature the data exhibited was that the shortage economy forced the overwhelming majority of consumers (92 percent) to accommodation; merely 2 percent of those involved in the investigations answered that they did not do anything, because usually they did not get into a situation when a commodity looked for by them turned out to be missing.

Let us examine how people accommodate themselves to shortage! The data below are published in the order of frequency of the individual answers; the total of answers exceeds 100 percent, since one person could mention several forms of behaviour.

It results from the formulation of the question that certain attitudes–e.g. forced spending–and the related forms of buyer's behaviour were not called to the buyer's mind, since we emphasized that they should think of commodities demanded by them very much. At the same time it is likely that the passive form of behaviour may conceal also other attitudes over and beyond queuing propensity, but we have no knowledge of our own of this.

*This is the point of our survey directly connected with János Kornai's works on shortage. We relate to what he described not only in the sense that in this case we are examining the same phenomenon (namely, what decisions are required by shortage on the part of consumers and which the forced measures of consumers are), but also in the sense that our investigations may provide data for the ideas expounded by him.

Table 1

Frequency of behavioural forms[a] of buyers mentioned in connection with shortage

Order of the frequency of occurrence	Behavioural form	Percentage
1.	Passive behaviour, giving up ("queuing propensity")	40
2.	Making a trip to get it ("search propensity")	32
3.	Searching after it ("search propensity")	19
4.	Tipping ("effort to win over the shop-assistant")	12
5.	Asking others to look for it ("search propensity")	6
6–7.	Booking, making inquiries ("queuing propensity")	5
6–7.	Substitution ("forced substitution propensity")	5
8.	Having it made, doing himself ("forced substitution propensity")	3
9.	Looking for it abroad ("search propensity")	1

[a]In the brackets after the behavioural forms we indicated to which of the attitude components enumerated by János Kornai the behavioural forms mentioned by those interviewed corresponded in our opinion. The behavioural form mentioned under 8 may also comprise the "willingness for making use of various distribution patterns".

It may be seen from the table that people may behave in many ways in situations brought about by the shortage economy; there are, however, also such people in great numbers who are just raging, waiting and resigning themselves to the fact that their purchasing intention has failed in absolute terms.

The (active) strategy most frequently followed is searching ("search propensity"). This behavioural form was mentioned by 58 percent of those giving an answer. Accommodation is equal to the postponement of purchasing ("queuing propensity") in a rather great number of cases. A considerable percentage of those interviewed mentioned tipping and making use of connections as a strategy to be enforced against the failure in purchasing ("effort to win over the shop-assistant") as well as forced substitution.

If we examine the various forms of behaviour broken down according to individuals, we can state that those with an exclusively passive behaviour amount to 26 percent, the share of those trying to do something is 51 percent and that of those with whom these two basic behavioural forms appear in a "mixed" way is altogether 15 percent. "Mixed" behaviour usually means that people were first "active", but after a certain time gave up and were waiting.*

Thus, the majority of people do have some buyer's strategy applied in such situations. From this fact we can draw the conclusion again that shortage is an overall and lasting feature of the market of consumer goods.

Foresight

"An alert buyer in a shortage economy does not buy when he actually needs the commodity, but when it is available". János Kornai calls the strategy of a buyer who purchases commodities not at the time when needs arise, but when they may be just obtained consumer "manoeuvring" as a sub-case of forced spending. [4]

23 percent of those interviewed mentioned that: it had occurred sometimes that they bought something just because it could be had at a given date, though they did not need it at that moment. Uneven supply, problems connected with "shortage articles" have developed a finer variant of stockpiling. People are storing small amounts of commodities qualified as shortage articles for a not too long time as reserves. What they fear is not that something will not be obtainable at all in the longer run, rather they wish to avoid situations that, owing to uneven supply fluctuating with unforeseeable periodicity, they cannot get something precisely when they need it. This buyer's behaviour may have, however, also a negative effect on commodity supply. This can only be a solution for individual persons, while for the entire population it can rather maintain excess demand, what is more, occasionally even articles whose supply would otherwise be sufficient at a given moment may run "short". However, shortage is unavoidably accompanied by a provident buyer's strategy: the endeavour for minimum security required for the "running of the household". This "foresight", forethoughtful behaviour is influenced by the intensity of shortage: if shortage is decreasing, buying in advance is also diminishing, while with increasing shortage also demand brought forward may assume a greater extent.

Buying in advance postulates a certain amount of money to be spared and–as it is also indicated by János Kornai–this may be a reason for and a form of forced spending. It turned out from our analysis that the extent of buying in advance did not depend on the size of income, and there was no difference between those with lower and higher incomes in this regard. The behaviour of "alertness" may be extended also to goods of

*6 percent of those interviewed gave no answers and – as it has already been mentioned – 2 percent of them mentioned that there were no such situations.

higher value. In this case also the amount of money required will be higher whose "advance payment" may obviously be afforded only by those with higher income. As regards the goods that are bought in advance those interviewed enumerated mainly articles of smaller value serving for meeting everyday demands, for which first of all a shopping bag is needed.

Equality "before the shortage"

Relying on the results of our investigations presented in the foregoing we have stated that people considered commodity supply as being full of chronic disturbances affecting all groups of commodities. In the opinion of those interviewed quantitative shortage of commodities was the most important in this regard. Within the general judgement of this situation, however, in theory also considerable differences may be found between various strata and groups of society, since the puchases of various strata and groups deviate from each other both in composition and quantity. We had no opportunity, to collect data on "demands" and consumer habits characteristic of individuals and families. We do have data, however, from which indirect conclusions may be drawn. Such data–resulting from the survey–are age, qualification, income, place in the division of labour, type of settlement and family structure. These features ought to be suitable for indicating the effect of the social status of individuals on opinions and experiences. In the knowledge of these data, however, we have to state again *that there is no real considerable difference between individual strata and groups in respect of the perception of commodity shortage and the forms of behaviour brought about by it.* This conclusion was drawn from various experiences of the investigation.

1. Considerable differences are made unlikely by the experience resulting from the answers given to questions discussed in Part One, namely, that commodities causing problems from the viewpoint of shortage cover almost the full range of consumer goods in each case–from foodstuffs to durable consumer goods.

2. In this respect it is also important that where demand and supply are not in quantitative equilibrium according to people, the commodities in question were usually needed by every one and not such ones for which differentiated consumer demands are arising. As a matter of fact, those involved in the survey missed fresh milk and bread in shops before closing, comfortable, good-quality shoes, tasteful clothing articles in appropriate sizes, nails, paper handkerchief, enamelled pots, bicycle tyres, spare parts, furniture made of good-quality material and not made according to the same pattern, or beams, doors, bath-tubs or lime for their dwellings under construction.

3. Concrete analyses* aimed at revealing differences also indicated that there were no such strata and groups, which have not had negative experiences in connection with supply, or whose opinion has considerably deviated from that of others. This does not mean, of course, that we have not found some difference between those interviewed in any respect. However, we may not draw such conclusions from these differences, that various groups of society are affected by supply problems to different extent owing to their objective position and the consumer habits following from this position with great probability. Differences indicate that the wider range of products sought by consumers with higher status may make negative experience more frequent for them and, on the other hand, in the case of these consumers the wider assortment of goods is accompanied by a greater buyer's exaction. In the following we try to describe in some detail which differences and in which respect were found between individual buyer's groups.

The judging of commodity supply as good or bad depended first of all on the extent to which somebody was affected: those buying certain products with greater probability than others (e.g. parents–children's wear, builders–building materials, etc.) were likely to judge supply more critically.

Nobody can "get away" without purchasing attempts ending in complete failure. This was experienced–according to the investigation–by everyone, independent of age, sex, income, etc. As regards the undertaking of long searching for certain products, qualification, age, family status and the place taken in the division of labour were the ensemble of variables forming differences. However, the differences appearing in this respect are largely influenced also by propensity, thus differences resulting from age are understandable. Other variables indicate that, because of the wider "consumer's basket", failures of buyers become more frequent. Greater demands are presumably also accompanied by the mentality that people are less and less willing to renounce of acquiring a certain article or to replace it by something else.

In case of purchasing "from under the counter" the fact whether somebody had a child or not influenced his (confessed) willingness to give a tip or look for personal connections more strongly than anything else. The existence of a child creates such situations in the life of a family that the acquisition of various commodities–naturally not only of those directly required by the child–becomes very important. One way of getting them is purchasing "from under the counter".

*The mathematical method applied was discriminancy analysis and step-wise regression analysis.

With the *discriminancy analysis* we examined which of the characteristic features available had an effect on the development of opinions and to what extent these determined the occurrence of given experiences.

By means of *regression analysis* we obtained an answer to the question what differences existed between individual strata and social groups in the judgement of the assortment (range of choice) of products.

Mathematical analyses were made with the help of János *Bartók*.

With the question referring to the "existence" of "shortage articles" qualification proved to be the variable influencing the answer. There were more highly qualified people who indicated to "existence" of such articles than less qualified people. Behind this result we may find more extensive knowledge and surveying capacity to obtain an overall view, on the one hand, and the effect of potentially larger consumer demands on the other.

Sex, age and qualification influenced the extent to which active or passive behaviour was characteristic of various people in their accommodation to shortage. Men are somewhat more active than vomen; with those over 60 passivity is dominating which is understandable in view of their age. Finally, the higher the qualification somebody has, the more likely it will be that he chooses an active strategy to solve the situation resulting from shortage.

Age and qualification are the factors according to which the share of those "buying in advance with foresight" is different. Elderly ones and those with lower qualification belong rather to those not buying in advance. Those with higher qualification–disposing of a greater suveying capacity to obtain an overall view and of more information–are perhaps more provident, while in the case of old age it may also very well be–over and beyond the foregoing–that, apart from shop-bags and money, also good feet are needed for "buying in advance". There is a difference also between men and women in this regard. This may result from the fact that everyday purchases belong rather to tasks of women.

In our opinion it is very important to emphasize that *incomes had no effect* either on opinions or on the measure of occurrence of negative experiences. At the contemporary level of commodity supply the fact how much money one has is of no great importance concerning the perception of shortage. The kind of settlement where people lived did not prove to be a general differentiating factor from the viewpoints of our investigation either. The explanation for this is, however, already much more complicated. In our investigation we could not deal with the problem in terms of which geographical units people were reasoning when thinking about purchasing. We believe that those living in smaller settlements got already used to the fact that a part of consumer goods required could only be bought in larger settlements. Consumers living in villages were dissatisfied first of all not because they could not do their shopping where they lived, but because they could not get what they were looking for even at the usual places of their purchases–in nearby or more remote settlements. It should be added that supply with food was considered by village population worse than by urban population, but this was the only case where a difference could be found between evaluations of the supply situation of those living in various settlements.

It is also remarkable that not a single criterion of social stratum formation could be found that would have caused differences in all answers given to our questions. *Qualification had the relatively greatest impact on answers.* In our opinion this indicates *cultural* differences and resulting *differences in demands.*

Commodity supply in Hungary in the mirror of opinions

The original purpose of our investigations was to survey how people judge the supply with commodities. Therefore, opinions concerning the supply with consumer goods had a central part in our investigations. Since this is the part of our survey mostly connected with the existing situation, the results obtained in this respect are submitted only at the end of our article and even here only the aspects from which conclusions may be drawn concerning the supply with commodities as a whole.

The overall picture about the commodity supply is determined by the level of supply in the major part of products constituting a given commodity group or in more important goods within a group.

In the formulation of opinions the "points of reference" selected have an important part. The existing commodity supply may be compared to that of previous periods, of neighbouring socialist countries, of capitalist countries, to the world of commodities known through mass media–just to mention some of the most important "points of reference". Beside the above, the comparison of various product groups with each other as regards the level and quality of supply is of great importance in the judgement of commodity supply in Hungary. Within this relative framework of comparison supply may seem good even though it is not satisfactory in a given commodity, but disturbances in the balance between demand and supply are relatively smaller as compared to other product groups.

Our question referring to the judgement of commodity supply was put in two ways. Firstly, people could freely tell the supply of which products was good or bad in their opinion. Their answers indicated two important things: 1. There were twice as many articles whose supply was not satisfactory in the opinion of those answering as those in the case of which supply was considered good. 2. Several commodities were mentioned *in both* groups. (Obvious examples are foodstuffs.) This seemingly contradictory character of opinions reflects a characteristic feature of contemporary commodity supply in Hungary. It is true, in general, that supply with staple consumer goods is ensured (while it is, of course, a matter of definition what can be regarded as a staple article). In reality, however, there are often disturbances in the equilibrium between demand and supply even in the case of these commodities. (As regards the supply with foodstuffs, meat supply is, for example, not continuous in smaller settlements; it is a frequent phenomenon that one or two hours before closing neither milk nor bread may be obtained in shops.)

As a second step people had to give their opinion concerning a certain number of product groups. As it has already been indicated, we chose 14 products groups in our survey. According to the opinions of the population, supply was best with milk and dairy products followed by detergents, washing ingredients and perfumery, household machines, durable cultural consumer goods, deep-frozen and semi-finished products, meat, fruit and vegetables, fuel, clothing articles for adults, small items needed every day, children's clothing articles, furniture, shoes and finally, building materials.

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As we have already indicated with questions related to problems resulting from the shortage economy, we separately asked which articles were to which the negative experiences of those involved in the investigations referred. It could be established from the answers that the range of articles mentioned in this respect was very wide, covering almost all consumer goods. It also turned out from comparisons that the groups of products most frequently mentioned were the same. In 1981 they were the following: spare parts, small items needed every day, building materials, clothing articles for adults, shoes and foodstuffs.* Two things follow from this fact: the population considered shortage in these products most serious and this cannot be mere coincidence. Despite all the reservations and limitations of subjective opinions we believe that the most serious disturbances in supply could really be found in the product groups enumerated.

References

1. Hankiss, E.: *Társadalmi csapdák* (Social traps). Magvető Kiadó, Budapest 1977.
2. Kornai, J.: *Economics of shortage.* North Holland Publishing Co., Amsterdam –New York – Oxford 1980. p. 461.
3. Kornai, J.: Op. cit. p. 414.
4. Ibid.

ТОВАРНЫЙ ДЕФИЦИТ И ОБЩЕСТВЕННОЕ МНЕНИЕ В ВЕНГРИИ

К. З. ФАРКАШ—Ю. ПАТАКИ

Авторы проводили для предложения потребительских товаров исследование общественного мнения для определения того, насколько характерна одна из центральных проблем социалистического хозяйства — товарный дефицит. Согласно исследованию, охватывавшему 14 основных групп потребительских товаров, в снабжении товарами проблемы оказываются хроническими, и это затрагивает интересы всего населения. Первичная проблема — это количественный дефицит, но параллельно с экономическим развитием всё больше значения приобретают и недостатки, связанные с узостью ассортимента товаров.

Исследование имело своей целью не сам дефицит, а его отражение в общественном мнении и вызываемую им стратегию покупателей. Чаше всего встречается как активная стратегия поиски товаров, но приспособление покупателя к дефициту часто ограничивается отсрочкой покупки. Из ответов на соответствующую анкету явствует, что довольно многие прибегают к чаевым, использованию знакомств, личных связей и вынуждением одного товара другим.

*In the case of foodstuffs meat, tropical fruits and tinned food were mainly mentioned.

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CAPITAL FORMATION IN HUNGARY IN INTERNATIONAL COMPARISON

P. SZARVAS

The data of international organizations published at national prices and the International Comparison Project (ICP) of the UN allow us to evaluate the decrease in the rate of capital formation of the Hungarian economy. It may be stated that this rate was high in the seventies. The strong reduction from 1979 on and the accounting for the distortive effects of the Hungarian price system resulted in our stepping back into the band of countries with medium capital formation. The extent and protraction over time of the decline cannot be considered extreme, either. The matter is rather that the conspicuous decline had been preceded by a conspicuous running away by international comparison.

After 1978 domestic expenditure had to be reduced in Hungary, which took place in most part at the expense of accumulation, whereby the structure of utilization of the GDP underwent a serious change. The considerable decline in the rate of accumulation (gross capital formation*) is not without precedent in the postwar history of the Hungarian economy. However, the extent and protraction over time of the developments of recent years are unique. Therefore, especially in professional debates, the question is raised whether the rate of accumulation has not fallen below the critical level and whether the drastic reduction of investment does not become, in the long run, an obstacle to development.

We shall try to answer these questions by means of an international comparison. Within the framework of an empirical examination, we shall compare the accumulation processes of the last ten years in Hungary with those of the advanced Western countries–and in a few respects also with those of the socialist countries–and we shall rely on these comparisons in drawing our conclusions.

Methodological considerations**

The international comparison of rates of accumulation raises several methodological difficulties. The best thing is to start from the fact that the available data allow two kinds of comparison:

*Accumulation in this article is used as a synonym of capital formation.

**In writing this section, I relied on László *Drechsler*'s researches.

– comparison of the data–or, of the rates calculated from them–given *in national currency* in the national economic system of accounts of each country;

– comparison of the figures calculated on the *basis of average international prices* by the International Comparison Project of the UN.

The data of international organizations published at national prices are plentiful. It should be noted, however, that this permits only so-called "*value-type*" comparisons that are affected not only by the relative differences in productivity in the production of investment and consumption goods (so far this is not yet a comparability problem), but also by the effects of the price distortions (which is unfavourable). Until 1980, the distortive effect of the Hungarian price system was especially strong because–as it is referred to in Hungarian economic literature–of its "negative two-level character", which overvalued the investment goods of high net income content and undervalued the consumer articles and services subsidized as a whole.

For the early 1970s, calculations were made to reveal the distortive effects of the price system.[1] These showed for 1970, in a calculative price system, a rate of capital formation by about 5 percentage points lower than the statistical data published. On the basis of the changes in prices up to 1979 the extent of the necessary correction is estimated at 3 to 6 percentage points. As far as we know, the World Bank also reduced the Hungarian rates of capital formation to about the same extent (by one-seventh) in its own calculations. It has to be considered, however, that the 1979 raising of consumer prices and the 1980 price reform perceptibly reduced the distortions of the Hungarian price system: the negative two-level character ceased. Thus, for the years after 1980, a smaller correction would be necessary than in earlier years.

The international comparisons made by the ICP are "volume-type" ones: they are aimed at the most precise possible comparison of volumes of products and services produced and consumed in each country at a given common measure (at international average prices). The results thus obtained are independent of both the price distortions in the various countries, and the differences between national productivities. However, because of the complicated character of these calculations, such types of data are rarely available to us and only with a delay and, in spite of all efforts, even these data have a significant margin of error. For this reason, we can only present the 1970 and 1975 results, adding to them our own calculations covering 1980.

General tendency of the rates of capital formation

The abundance of data on capital formation given at national prices allow us to analyse rates of capital formation of various contents, which all reflect the general tendency of the accumulation process as well as the specific character of the indicator applied.

As a matter of fact it is the *rate of gross capital formation* that shows most comprehensively the share of the resources spent on accumulation from the GDP,

independent of whether this accumulation was turned into means of production, or increased stocks. After deducting the latter, we receive the *rate of gross fixed capital formation.* Its analysis is important, because fluctuations of changes in stocks were very high in Hungary, having a considerable effect on the rate of gross accumulation, while in Western countries changes in stocks were smaller.

These indicators were calculated at current as well as at unchanged prices and, since no important difference showed up, in the following only the results obtained at current prices will be dealt with.

On the basis of these results the question can be answered, *what similarities and differences exist in the development of the capital formation in the 1970s in the advanced countries and in Hungary.*

The reference was composed of two groups of countries: the OECD and the European Community. This aggregation blurs, of course, the specific character of each country. It shows, however the main line—the tendency that may be called general—of the accumulation processes of the Western world economy, that of the most important Western partners of Hungary.

Figures 1 and *2* presenting the rates of gross capital formation and of gross fixed capital formation show that, after the investment peak of 1973–1974, a considerable fall came in the Western countries in 1975, followed by a slow rise, not free from halts. 1979 brought a new break, even if this is not clearly seen in the figures. (It is well known that 1981 and 1982 were years of a long drawn-out recession.) The average rate of the advanced countries fell by 2–3 percentage points from the peak boom of the early 1970s. Later on, however, up to the end of the decade it became relatively stabilized at a level slightly above the negative "record" of the crisis year of 1975.

The curve of the Hungarian accumulation rate is visibly different from that of Western countries. The movement of a wide amplitude which took place in the period in question strikes the eye. The cyclicality of the investment process clearly stands out: it is composed of the peaks of 1971, 1975, and 1978 and of the troughs of 1973, 1976, and of one after 1979 which cannot yet be clearly identified.

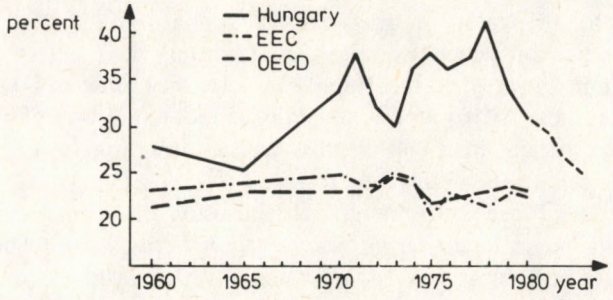

Fig. 1
Rate of the gross capital formation in the GDP
(at current prices)

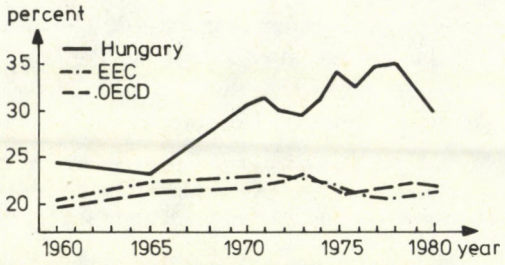

Fig. 2
Rate of the gross fixed capital formation in the GDP (at current prices)

A few conclusions that can be drawn on the basis of comparison with the advanced Western countries:

– In the 1970s a considerable difference developed between the accumulation rate of Hungary and that of Western countries; their curves *opened like scissors.*

– Although the business cycles in the Western countries were not without effect on the accumulation rate, one cannot speak of any "accumulation rate cycle". It is a different question that the *size* of accumulation is one of the main components of cyclicality. This difference has to be emphasized, because it throws light on the fact that accumulation and the main aggregates–such as the GDP–move parallel to each other, and therefore, the rate itself does not follow the cycle. As opposed to this, what happened in Hungary was that, amid sharp turns of the accumulation process, GDP was growing, even though not smoothly, whereby *the accumulation rate showed an identical configuration with the investment cycle.*

– It is shown by the figures and, knowing the Western business cycles, it can be definitely stated that in the course of the 1970s the Hungarian cycle moved clearly asynchronously with the Western ones: when there was a boom in Hungary, recession prevailed in the West, and at the time of the Hungarian slowdown an upswing came in the West.

– Comparison of the rates of gross capital formation and of fixed capital formation–the difference of which expresses, as a matter of course, the extent of inventory accumulation–shows that the Hungarian inventory processes change much more drastically than those in Western countries. Therefore, the rate of fixed capital formation is much "smoother" than that of gross capital formation. In comparison with Western countries, the gap is wide in this case, too.

The figures presented lead us to the general conclusion that *the Hungarian rate of accumulation might be judged as very high by international comparison.* This statement can be verified in detail by examining *Tables 1* and *2* which make it quite clear that between 1970 and 1980 the rate of both aggregates took one of the first three places in the order of the 25 OECD countries. (The only exception is the fixed capital formation of 1973.)

In comparing the levels of rates of accumulation the limitations mentioned under the methodological considerations have to be remembered. Taking also these into account, the statement can be made that on the basis of data given at national prices the Hungarian rate of accumulation *largely surpassed that of the advanced industrial countries* in the period under examination. Thus, Hungary is among the countries with the highest rates of accumulation and this is not changed even if *the distortive effect* of the price system is eliminated.

Thus, the fact that the Hungarian rate of accumulation decreased in 1981, in 1982 as well as in 1983 is no more than stepping back to the *zone* of the countries qualified as showing medium rate of accumulation. *Our examination shows that in an international comparison. The Hungarian rate of accumulation has not sunk to a dangerously low level.*

Extent and duration of the decline

Beside the tendecy and the established level of the rate of accumulation it will be useful to examine in an international comparison, whether the *extend and protraction over time* of the decline in the accumulation rate are not indicative of specific Hungarian processes, not to be found elsewhere. These phenomena are to be analysed, since it is justly assumed that the drastic and long-lasting decline of the accumulation rate exerts in itself an unfavourable effect on economic conditions. Have such elements asserted themselves in other countries as well?

It is to be remarked that the "parameters" of the decline of the Hungarian accumulation rate were determined on the basis of the period from 1978 to 1982, and this is compared not with the same period for the Western countries, but with their *worst* period found in the 1970s. As it has been mentioned, the foreign economic events affected Hungary with a delay, which justifies that different periods be compared.

This "tendentiously" constructed Table reveals quite a lot of things about the tendency of accumulation rates in Western countries:

– It cannot be considered either extreme, or a special case if the accumulation rate decreases in a country continuously over several (three to six) years. It may be added that there are, in addition to those included in *Table 3,* a few countries in which a slower but continuous decline is taking place (for example, the FRG, Austria, Japan).

– Especially in the case of the countries on the top of the list the rate of the decline is quite considerable, which is connected mainly with a thorough restructuring of the GDP utilization.

– Almost all of the countries with high rates of accumulation–except for Ireland and Iceland–underwent a period of reduction, either short or long. It is also to be noted that almost all countries in which the gross accumulation rate surpassed 30 percent in one of the years between 1970 and 1980 were compelled to reduce it sooner or later.

Table 1

Rate of gross capital formation in the GDP, in percent (at current prices)

Country	1960	1965	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
OECD total[b]	21.3	22.9	22.9	22.9	23.2	24.7	24.5	21.4	22.3	22.6	22.8	23.3	22.5
OECD-Europe[b]	23.4	24.4	25.2	24.2	23.9	25.0	25.1	22.0	23.1	22.4	21.5	22.6	22.8
EEC	23.2	24.0	24.9	23.9	23.5	24.8	24.3	20.9	22.5	21.9	21.4	22.5	22.4
Canada	22.9	25.7	21.0	22.2	22.3	23.6	25.3	23.9	24.1	22.9	22.5	24.2	22.7
United States	18.5	20.0	17.8	18.9	19.4	20.3	19.2	16.6	17.9	19.7	20.5	20.1	18.1[a]
Japan	33.7[c]	32.0	39.1	35.8	35.6	38.1	37.3	32.8	31.9	31.1	31.3	33.0	32.4[a]
Australia	28.4[c]	28.1	27.4	25.6	23.0	25.2	24.7	23.5	24.2	22.4	23.8	22.5	24.2
New-Zealand	23.9[c]	27.4[c]	27.1[c]	25.1	23.7	26.5	35.1	30.3	30.1	26.2	21.9	25.4	22.7
Austria	27.6[c]	28.0	29.7	29.7	30.6	30.9	31.1	26.1	27.3	27.9	25.9	27.5	28.8
Belgium	19.1[c]	23.2	24.3	23.4	21.8	22.7	24.9	21.9	22.4	22.0	21.8	21.3	21.5
Denmark	23.0	23.8	25.7	24.8	24.8	26.1	25.2	20.9	24.0	22.6	21.9	21.2	18.2
Finland	28.4[c]	28.0	29.5	29.6	27.1	28.6	34.5	32.7	27.0	24.5	21.0	25.1	27.7
France	23.0	24.9	26.1	25.1	25.5	26.2	26.7	23.0	24.5	23.4	22.1	22.9	23.1
FRG	27.2	28.3	27.9	26.9	26.3	25.3	22.5	22.5	21.9	21.8	22.0	24.4	24.8
Greece	18.6	26.3	28.1	27.9	29.6	37.8	29.3	27.0	26.6	27.4	27.7	29.9	28.0
Iceland	28.3	27.7	23.2	31.8	26.4	29.1	33.4	34.0	27.9	29.7	24.7	25.1	27.1
Ireland	16.4	23.7	24.5	24.0	25.1	26.9	29.1	22.2	24.9	27.9	28.6	33.5	28.1
Italy	24.7	20.0	23.1	21.0	20.4	24.2	26.6	20.3	23.7	21.4	20.0	21.3	24.9
Luxemburg	22.0	29.1	25.7	31.0	29.5	28.3	22.6	24.4	24.4	22.1	27.0	24.6	27.4
the Netherlands	26.8	26.7	27.9	27.0	24.4	24.6	24.2	20.7	20.4	21.6	21.9	21.7	21.5
Norway	29.8	29.8	30.5	31.6	27.7	30.1	33.6	35.2	37.1	36.3	28.5	27.4	28.1
Portugal	19.0	21.7	23.6	21.9	24.1	26.3	24.9	16.3	20.8	25.3[a]	23.3[a]	22.3[a]	21.4[a]
Spain	19.0[c]	24.7	24.4	22.5	23.7	24.8	28.1	26.5	22.1	22.6	20.8	20.3	21.4
Sweden	24.7[c]	27.1	25.6	23.2	22.2	22.3	23.9	24.2	23.4	20.2	17.5	20.1	21.5
Switzerland	29.0	30.4	32.3	32.5	33.5	31.3	31.2	23.0	20.7	20.7	21.7	23.9	27.1
Turkey	16.0	14.9	19.8	17.8	17.7	18.7	19.9	23.1	24.1	25.5	23.0	22.4	21.8[a]
United Kingdom	18.6	19.7	19.4	18.7	18.4	21.5	21.8	18.1	19.6	19.3	18.7	19.2	16.2
Yugoslavia	38.1	35.7	35.9	36.8	31.4	33.2	27.1	36.0	34.7	39.2	38.1	40.9	–
Hungary	27.8	25.5	33.6	37.7	31.7	29.7	35.8	37.8	36.2	37.2	41.3	34.2	30.7

[a] estimated figure
[b] calculated at 1975 rate of exchange
[c] according to the "old" SNA

Table 2

Rate of gross fixed capital formations in the GDP, in percent (at current prices)

Country	1960	1965	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
OECD total[b]	19.8	21.3	21.7	22.0	22.4	23.2	22.7	21.5	21.2	21.5	22.0	22.1	21.8
OECD-Europe[b]	21.0	22.7	23.1	23.2	23.1	23.3	22.9	21.9	21.6	21.3	20.9	20.9	21.3
EEC	20.7	22.4	22.9	23.1	22.8	22.9	22.4	21.2	21.0	20.7	20.6	20.9	21.2
Canada	21.9	23.5	20.8	21.8	21.8	22.4	23.0	24.0	23.3	22.8	22.3	22.6	23.1
United States	17.9[c]	18.8	17.6	18.1	18.7	19.1	18.4	17.0	17.2	18.4	19.3	19.4	18.2[a]
Japan	30.1	29.9	35.5	34.3	34.2	36.4	34.8	32.4	31.3	30.5	30.8	32.0	31.7[a]
Australia	25.1	27.6	26.0	25.5	23.7	22.5	23.0	23.4	22.8	22.8	22.7	22.0	23.9
New-Zealand	22.3[c]	23.6[c]	22.5[c]	20.6	22.3	22.6	25.7	27.2	25.0	22.0	20.3	17.8	17.8
Austria	24.9[c]	27.4	25.9	27.9	24.0	28.5	28.4	26.6	26.0	26.7	25.5	25.1	25.3
Belgium	19.1[c]	22.4	22.7	22.1	21.3	21.4	22.7	22.5	22.1	21.7	21.6	20.6	21.4
Denmark	19.4	21.7	24.7	24.2	24.6	24.8	24.0	21.1	23.0	21.9	21.5	20.5	18.3
Finland	27.3	26.0	25.9	27.3	27.7	28.7	29.6	31.0	27.7	26.6	23.4	22.8	24.6
France	20.1	23.3	23.4	23.6	23.7	23.8	24.3	23.3	23.3	22.3	21.4	21.4	21.6
FRG	24.3	26.1	25.6	26.4	26.0	24.5	21.9	24.5	20.7	20.7	21.2	22.6	23.6
Greece	19.0	21.6	23.6	25.2	27.6	28.0	22.2	22.8	21.2	23.0	23.9	25.6	23.5
Iceland	29.3	25.9	23.8	29.2	27.9	29.4	31.6	32.1	28.6	28.0	25.4	24.5	26.5
Ireland	14.4	21.4	22.7	23.7	23.7	25.3	24.7	22.6	24.8	25.9	28.4	31.4	28.9
Italy	22.6	19.3	21.4	20.4	19.8	20.8	22.4	20.6	20.0	19.6	18.7	18.9	20.0
Luxemburg	21.0	28.0	23.5	28.5	28.2	27.4	24.7	27.7	24.5	25.3	25.7	25.0	25.3
the Netherlands	24.1	25.1	25.8	25.9	23.8	23.1	21.9	20.9	19.3	21.1	21.3	21.1	21.0
Norway P	29.0	28.2	26.5	29.7	27.8	29.3	30.5	34.2	36.3	37.1	31.8	27.8	25.0
Portugal	17.6	17.3	17.6	18.8	20.5	20.3	19.7	19.7	19.0	20.1[a]	20.1[a]	19.1[a]	21.0[a]
Spain	19.4[c]	21.7	23.2	21.2	22.2	23.6	24.7	23.3	21.8	21.0	19.9	18.9	19.6
Sweden	22.1[c]	24.7	22.5	22.1	22.3	21.9	21.5	21.0	21.2	21.2	19.4	19.8	20.3
Switzerland	24.8	28.7	27.5	29.3	29.7	29.4	27.6	24.0	20.6	20.7	21.4	21.8	23.8
Turkey	16.0	14.6	18.6	17.0	17.4	17.9	18.6	19.6	23.2	23.2	21.0	19.4[a]	18.0[a]
United Kingdom	16.4	18.3	18.6	18.4	18.3	19.6	20.3	19.5	19.0	17.9	18.1	17.9	17.8
Yugoslavia	28.9	23.9	28.4	27.5	26.2	24.1	24.8	28.3	30.3	22.1	35.3	34.6	–
Hungary	24.3	23.1	30.5	31.3	29.9	29.3	31.0	33.9	32.4	34.7	34.8	32.4	28.9

[a]estimated figure
[b]calculated at 1975 rate of exchange
[c]according to the "old" SNA

Source: (4)

Table 3

Decline in the gross capital formation rate

Country	Period	Number of years	Rate at the beginning of the period	Rate at the end of the period	Extent of decline (percentage points)
Finland	1974–78	4	34.5	21.0	13.5
New-Zealand	1974–78	4	35.1	21.9	13.2
Switzerland	1972–77	4–5[a]	33.5	20.7	12.9
Greece	1973–76	3	37.8	26.6	11.2
Norway	1976–79	3	37.1	27.4	9.7
Yugoslavia	1971–74	3[b]	36.8	27.1	9.7
Luxemburg	1971–77	6[b]	31.0	22.1	8.9
Spain	1974–79	5	28.1	20.3	7.8
the Netherlands	1970–76	6	27.9	20.4	7.5
Hungary[c]	1978–82	4	41.3	26.5	14.8

[a] identical rates in 1976 and 1977
[b] the "out-of-place" data of 1973 (for Yugoslavia) and 1974 (for Luxemburg) were disregarded
[c] taking into account 1983, these figures change, of course

(Exceptions are, again, Ireland and Iceland.) Japan alone was able, a slight decline notwithstanding, to keep its rate of accumulation above 30 percent all along.

– In six of the nine countries shown in *Table 3* the decline of the accumulation rate stopped at 20–22 percent.

Examining the situation of Hungary in view of the above considerations, the following can be stated:

1. The decline of the rate of accumulation is by all means greater in Hungary than in any of the OECD countries. And, if the developments of 1983 are also taken into consideration, the difference is even greater. At the same time, attention has to be paid to the fact that this fall followed from a level of an absolute record: one above 40 percent. Thus the fast decline is to be ascribed at least as much to the peak year of 1978 as to the inevitable developments that followed. Between 1977 and 1982 the decline reached "only" 10.7 percentage points. *That is to say, in international comparison the conspicuous decline had been preceded by a conspicuous running away.* It can be added: the phenomenon of a sudden decline of the accumulation rate may be considered almost as regular in a place where, by international comparison, a high level has established itself.

2. As for the *period of the reduction, four years* (with 1983, five) *cannot be considered as extremely long.* The opinions which object to the protraction over time of the reduction of the accumulation rate cannot be well grounded by international comparison.

3. The level that has established itself as a consequence of the decline of the accumulation rate cannot be considered as especially low, either; the countries which went along a way similar to that of Hungary have landed at even lower levels of accumulation.

Of course, what has been said is valid until 1983. A further serious decline would already lead to an *extremely low* accumulation rate by international comparison.

The Hungarian investment cycle and the international business cycle

Hungarian research works concerned with investment cycles demonstrated in detail the *"foreign-trade-symmetrical"* character of these cycles. [5] In the period of investment expansion the foreign trade deficit is gradually growing and finally becomes a constraint which can only be removed through a reduction of investment. An improvement of the balance of trade then allows to start an upswinging cycle of investment again.

International comparison completes this well-known series of events from the aspect of foreign effects, first of all the market situation in Western countries. In *Fig. 3* the rate of the Hungarian gross accumulation is presented together with the cyclical

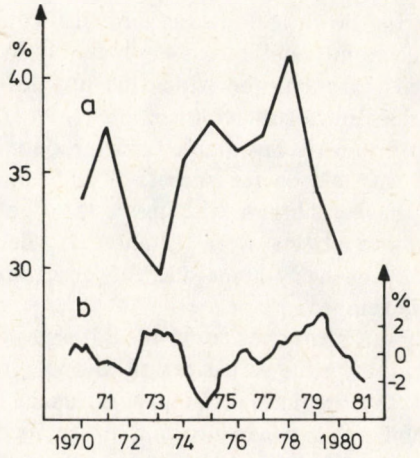

Fig. 3

a. Gross capital formation rate in Hungary in percentage of the GDP. b. Cyclical movement of the aggregate GDP of France, FRG, Italy and UK (in percentage of deviation from the trend)

Source: Data of the Central Statistical Office and [6]

movement of the four big EEC countries' aggregate GDP, which is characterized by its deviation from the trend. The nearly symmetrical movement of the two curves is clearly seen: they become parallel only from 1979 on.

How should we interpret these "anticyclical cycles"? The *troughs* in the investment cycles of Hungary during the 1970s practically coincide with the *booms* of the Western partners (1972–1973, 1976). Therefore, the restoration and improvement of the foreign economic equilibrium was supported not only by the domestic measures constraining demand and providing for exportable commodity stocks alone, but also by the *increased absorptive capacity of the foreign markets.* Looking back on the events, one can understand the illusion according to which one or two years of self-restriction would be enough to restore the foreign equilibrium, to swing up investments, i.e. to cure our ills. In fact, the actual success of the restrictive economic policy was due in a great part to the *external conditions* just then taking a favourable turn.

Both the cycle and the effect mechanisms developed symmetrically in the period of upswing (or rather, dashing upwards) of the Hungarian investments (1970–1971, 1974–1975). What happened at that time was not only that domestic demand, first of all for investment, increased, slowing down the building up of exportable commodity stocks while increasing demand for imports, but this situation developed exactly at a time when stagnation, oversupply, and recession prevailed on the Western markets. *The demand suction of the Hungarian market and the supply pressure of the world market* asserted themselves simultaneously. That is to say, the given foreign economic conditions promoted, as it were, the domestic processes, partly by offering imports "on a silver tray", and partly by slowing down and making more difficult Hungarian exports. As a consequence, the foreign economic equilibrium was bound to be upset.

There was, however, a phenomenon which did not develop symmetrically at the peak and the trough of the Hungarian investment cycle. At the time of the restoration and improvement of equilibrium the favourable foreign economic conditions were hardly mentioned: the emphasis was laid on the success of the economic policy measures. As opposed to this, when the equilibrium was upset, the "unfavourable", "other than expected" foreign economic effects were emphasized. Because of an insufficient knowledge of the cyclically changing home and foreign economic processes a kind of "economic policy cycle" developed.

We have deliberately not mentioned so far the last phase beginning in 1977 and still lasting, somewhat different from the earlier described ones. In 1977–1978 investments ran away once again. What is more, inventories grew extremely, too, which signals, by the way, that enterprises know from experience and anticipate the steps to be taken by economic policy. It is to be read from *Fig. 3* that in the period in question there was rather an upswing than a recession in the Western countries. Although this upswing was less lively than the earlier ones, the two cycles progressed parallel in the upward phase. As it follows from the functioning of the market economies, the slight upward trend did not in the least hinder the expansion of Hungarian imports: being in the same cycle had no impeding effect in this respect at all.

The situation is different with the descending part of the curve, which is already a period when the two cycles develop parallel to each other. The economic policy measures aimed at reducing the excess demand for investment and the deficit of the balance of payments do not meet with foreign economic conditions confirming their effect and enabling the expansion of exports. On the contrary: the world economy sliding into recession sets strict limits to the Hungarian exports. This is one of the reasons why the reduction of investment has not lasted only one or two years, but is now in its fifth year, and the whole of the economy is in a state of stagnation-recession.

Far be it to blame entirely foreign factors for the difficulties of the Hungarian economy. A comparative analysis of the Hungarian investment cycle and of the business cycle of the Western world economy as well as of the role of the Hungarian economic policy played in the former prove that in an open economy having close relations with the cyclically developing capitalist world economy the cycles themselves can hardly be prevented. It is, however, not necessary that they be concomitant with such extreme fluctuations as in the case of the Hungarian accumulation.

Comparison of the rates of capital formation with the aid of the ICP results

The ICP of the UN compares the GDP of the member countries and its components [7], [8]. This provides us with rates of accumulation *in terms of volume,* which can be considered *independent* of the price deflections applied in certain countries, and of the relative differences in productivity.

The ICP has completed three phases so far, with a growing number of participating countries. Results are available for the years 1970, 1973, and 1975; in this study the data of the first and the third phases were used.*

Beside presentation and analysis of the data, an extrapolation has been made for the accumulation rate of 1980 with the aid of the appropriate volume indices; for Hungary, development of the rate has been examined up to 1983.

Table 4 shows clearly that the comparison in terms of volume also supports the statement that the Hungarian accumulation rate in the GDP is to be judged as high by international standards. More exactly: in 1970, beside Japan, also the rates of the FRG, the Netherlands and France were higher, but in 1975 only Japan preceded Hungary on the list, though the comparison can be made already with 14 advanced industrial countries instead of 9.

The conclusion can be drawn that by the late 1970s *the rate of the Hungarian accumulation had reached a level higher than that of most of the advanced Western*

*In the second phase the number of countries was increased from 10 to 16 and for these countries data for 1970 and 1973 were published. Because of the short period these latter results were neglected in this study.

countries, even after elimination of the effects of ,the price system, *computed at "international prices"*.

Table 4

Rates of capital formation on the basis of the ICP, in percent
(advanced industrial countries)

Country	Rate of gross capital formation			Rate of fixed capital formation	
	1970	1975	1980[a]	1970	1975
United States	19.6	19.3	19.0	19.3	20.0
FRG	34.4	23.9	25.9	32.2	24.1
Denmark	–	25.2	21.9	–	26.6
Luxemburg	–	28.9	27.3	–	28.4
France	29.7	26.3	24.6	27.3	26.6
Belgium	24.5	24.3	22.9	23.0	24.9
the Netherlands	31.3	23.7	22.4	28.8	23.9
Austria	–	23.1	21.8	–	23.9
Japan	36.9	36.5	35.8	32.9	36.1
United Kingdom	21.9	17.9	16.8	21.0	19.3
Spain	–	26.1	22.4	–	22.9
Italy	26.0	22.7	22.3	24.2	23.0
Ireland	–	21.7	25.8	–	22.7
Hungary	27.7	32.8	30.6	24.3	28.8

[a]Extrapolation was made on the basis of the 1975 ICP data in a way that the ICP figure of the GDP was multiplied by the quantity index of the national price, and the figure of the gross capital formation by the index of the fixed capital formation which was more easily available. Thus the rate extrapolated for 1980 is expressed at 1975 prices, while the data of 1970 and 1975 are to be understood at the prices of the same years.

Source: [7, 8]

It is, however, by all means to be noted that 1975 was expressly a *crisis year* for the Western countries: in most countries the GDP, industrial production and, perhaps in the first place, also investment fell in absolute terms. *Table 4* shows that the rate of gross accumulation fell to some extent in every country between 1970 and 1975, it increased solely in Hungary. Also, we know from the data at national prices that in Hungary the rate continued to rise until 1978, thus, the situation of 1975 can be interpreted as an illustration valid for at least five years (1974 to 1978).

It is worth calling attention to the fact that in 1975 the rate of *gross fixed capital formation* surpassed that of gross capital formation in quite a few countries which happened because of the *reduction of stocks* (negative stocks accumulation). Therefore,

in a few countries where the rate of gross capital formation was particularly low (United States, United Kingdom), relatively more fell to fixed capital goods.

Beside the advanced Western countries, the third phase of the ICP allows comparison with three socialist countries as well. (See *Table 5.*)

Table 5

Rates of capital formation on the basis of the ICP, in percent
(Socialist countries)

Country	Rate of gross capital formation	Rate of gross fixed capital formation	Inventory
Romania	34.5	27.9	6.6
Yugoslavia	28.7	21.1	7.6
Poland	37.1	32.2	4.9
Hungary	32.8	28.8	4.0

Source: [7], [8].

In 1975 the rate of accumulation was high not only in Hungary, but in the other three socialist countries covered by the examination as well. Of the 34 countries, Poland was first, Romania fourth, Hungary fifth, and Yugoslavia seventh on the basis of the gross capital formation rate. Especially inventory accumulation is conspicuous; in this respect, the four socialist countries, together with the Philippine Islands, occupy the first five places.

Of course, on the basis of one single year and the data of three other countries no far-reaching conclusions can be drawn. As much can be stated, however, that Hungary seems to fit into the picture drawn of the majority of the socialist countries characterized by a high rate of accumulation in the 1970s by international comparison.

Extrapolating the data available for 1975 with the aid to quantity indexes calculated at national prices, a rough estimation can be made of the 1980 values of the rates of accumulation.* (This we could do, unfortunately, only in the case of the capitalist countries, since no data are available for the socialist countries in the SNA system).

The results are shown in *Table 4,* where the rates of accumulation of three "turning" years of the 1970s can, thus, be seen together.

The results confirm—and extend up to 1980—what has been said earlier: evaluating the Hungarian rate of accumulation at international prices, it is found high by

*It is a methodological deficiency of such type of extrapolation that data calculated at international prices are extrapolated with the aid of indexes calculated at national prices – which is not to be considered a perfectly correct procedure.

international comparison. If the extrapolation of the Hungarian rate is carried on with the factual data of 1981 and 1982 and with the plan figures of 1983, the accumulation rate thus obtained would still be about 25.5 percent, which is not extremely high by international comparison, but can by no means be called low.

References

1. Bánhídi, F.: Price model – price computations. In: *Long-term models at work*. Akadémiai Kiadó, Budapest 1984.
2. Dániel, Zs.: The reflection of economic growth: experimental computations to revise synthetic value indicators of output. *Acta Oeconomica*, Vol.15 (1975), No. 2.
3. Csikós-Nagy, B.: *A magyar árpolitika* (The Hungarian price policy). Közgazdasági és Jogi Könyvkiadó, Budapest 1980.
4. National accounts. Vol. I. Main aggregates. Vol. II. Detailed tables, 1951–1980. OECD, 1982.
5. Bauer, T.: *Tervgazdaság, beruházás, ciklusok* (Planned economy, investment, cycles). Közgazdasági és Jogi Könyvkiadó, Budapest 1981. (Forthcoming in English).
6. Historical statistics 1960–1980. OECD, 1982.
7. Kravis, I. B. – Heston, A. – Summers, R.: *International comparisons of real product and purchasing power*. Johns Hopkins University Press, Baltimore 1970.
8. Kravis, I. B – Heston, A. – Summers, R.: *World product and income*. Johns Hopkins University Press, Baltimore 1982.

ПРОЦЕССЫ НАКОПЛЕНИЯ ВЕНГЕРСКОГО НАРОДНОГО ХОЗЯЙСТВА В МЕЖДУНАРОДНОМ СОПОСТАВЛЕНИИ

П. САРВАШ

Данные, публикуемые международными организациями в национальных ценах и Программа международного сопоставления ООН (ICP) позволяют дать оценку падения доли накопления в венгерской экономике. Можно установить, что венгерская норма накопления в 1970-ых годах была относительно высокой. Её заметное сокращение начиная с 1979 года и учёт искажающего влияния венгерской системы цен привели к тому, что Венгрия вернулась в полосу стран со средним накоплением. Размер и протяженность во времени спада не могут быть оценены как крайне большие, речь идёт скорее о том, что значительный спад следовал за повышением, считающимся чрезвычайным в международном сопоставлении.

Между циклом накопления венгерской экономики и циклом конъюнктуры капиталистического мирового хозяйства наблюдается характерная взаимосвязь. Примерно до 1977 г. наблюдалась асинхронность, которая содействовала как нарушению внешнего равновесия, так и его восстановлению. Начиная с 1977 г. можно говорить о параллельности, поэтому хозяйственно-политические меры, направленные на сокращение чрезмерного инвестиционного спроса дефицита платёжного баланса не находят внешнеэкономических условий, которые усиливали бы их действие и позволили бы увеличивать экспорт.

Опираясь на данные ICP, можно указать, что венгерская норма накопления — даже в «международных ценах», после исключения влияния системы цен — достигает уровень, превышающий норму большинства развитых капиталистических стран.

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THE EFFECTS OF RECESSION ON INFRASTRUCTURE

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The article reports on the latest research on infrastructure based on international comparison and publishes the numerical results of the international comparison of relative levels from 1965 up to the end of the last decade. In addition to describing the relative infrastructural development of the countries examined, the authors emphasize the roles of infrastructural investments and labour as determining factors. The economic policy background of the development of infrastructure is also presented.

The changes in infrastructural development are traced in relation to the new economic policy developments of the seventies, the "critical decade", to new trends in the world economy and to the rearrangement of the economic points of emphasis. Earlier established international long-term development trends in infrastructure are reassessed. Relying on the lessons of the investigation, the most important conclusions for the future of infrastructural development in Hungary are summarized.

In the past years several studies have dealt with the state of infrastructure in Hungary, the role of infrastructure and services in economic growth. Realizing the deficiencies of infrastructure, the serious tensions resulting from it and the complicated interrelation between the further development of the economy and the level of infrastructure, the creation of a long-term development strategy of infrastructure and its alternatives have also been included in the long-term planning in Hungary, the first time in the planning practice of socialist countries [1].

Beside the results of the research work focusing on the Hungarian infrastructure, another important basis for planning purposes was provided by international experience based on international comparisons covering a longer historical period (1860–1970) on the one hand and the last decade (from 1970 up to the beginning of the 80s) on the other [2, 3]. In various debates, however, the problem has been justly raised that, as a consequence of the changes in the world economy in the late 1970s and the early 1980s, when evaluating the present period or working out concepts about the future, it is no longer enough to rely on the international experiences of infrastructural development after the long post-war boom period. New economic policy developments of the 1970s, the beginning of a new world economic epoch and the shifts of emphasis brought about considerable changes in real economic processes determining infrastructural development, modified previous proportions of production factors and were (and still are) able to render previously established long-term international development trends irrelevant.

It seems therefore necessary that an international analysis relying on new data should be given, first of all from the viewpoint of Hungary and thus new ideas be provided for Hungarian planning as to

- how far international economic processes, including also hectic fluctuations, have influenced the levels of the whole infrastructure and of its major fields;*
- what kinds of short- and long-term changes may be perceived in the volume and the structure of both the labour force employed in infrastructure and the capital invested in this area;
- what shifts of priorities may be experienced in the economic policies of various countries with respect to infrastructure, and what connections exist between the production basis in the narrow sense and the infrastructural background;
- what conclusions may be drawn from all this for the future in general and for Hungary in particular.

Development of relative international infrastructural levels

In support of our conclusions we submit the results of a comparison made for four benchmark years (1965, 1970, 1974 and 1978) of the last two decades (*Table 1*). The procedure applied for the quantification of infrastructural level is a kind of synthesizing of the set of natural indicators relying on an international data basis.**

The most important characteristics of the relative levels expressed in scores can be summarized as follows.***

*To our knowledge, an appraisal of the most important international trends has been undertaken up to now only by our research project made on behalf of the UN ECE and the UN DP (in the framework of the Trans-European Motorway Project). It was published in English at the beginning of 1982. [4] As regards relative infrastructural levels, the computation material of the present study is based mainly on this work.

**For a detailed description of the method, see [2]. The scores indicate the relative levels of infrastructural development of the individual countries (as compared with other countries). The infrastructural scores vary between 0 and 100; the maximum value of 100 would be assumed by the hypothetical country which would have the highest values of all the indicators (25) used for the computations. The scores of the individual countries express the level of infrastructure as a percentage of this hypothetical country.

The primary task of the scores is to determine relative levels of infrastructural development of the countries for the given period. Besides, they may also be used for tracing the relative changes in time. For they indicate whether the infrastructural levels of any two (or more) countries moved nearer to or farther away from each other between two periods and furthermore whether or not some country overtook another. However, the scores are not directly suitable for describing the dynamic infrastructural development of a country.

***Data presented in the following tables differ, although only to a small extent, from previously published results (e.g. in [5]), referring to the same years, since the computation on which [4] is based uses corrected indicators.

Table 1

Infrastructure as a whole: scores and the order of countries*

Country	1965		1970		1974		1978	
	Order	Score	Order	Score	Order	Score	Order	Score
Norway	3	67	3	68	1	71	1	71
Switzerland	6	63	4	67	3	69	2	70
Sweden	2	70	2	71	4	69	3	69
Denmark	4	65	6	64	6	64	4	68
USA	1	71	1	71	2	70	5	68
Canada	5	64	5	65	5	66	6	67
Belgium	10	55	9	56	7	58	7	60
GFR	7	60	7	58	8	58	8	59
the Netherlands	13	49	8	56	9	56	9	59
Finland	11	50	11	54	10	56	10	58
Austria	9	55	12	53	12	53	11	56
UK	8	56	10	54	11	55	12	56
France	12	49	13	51	13	51	13	55
GDR	14	48	14	48	14	50	14	51
Czechoslovakia	15	43	15	45	15	45	15	46
Greece	21	34	18	39	18	44	16	46
Italy	17	38	16	43	16	44	17	45
Ireland	16	40	17	42	17	44	18	45
Spain	22	32	21	36	20	39	19	42
Hungary	*19*	*35*	*19*	*38*	*19*	*40*	*20*	*41*
Bulgaria	18	36	20	37	21	38	21	39
Poland	20	35	22	36	22	37	22	38
Portugal	23	29	23	30	23	32	23	34
Yugoslavia	24	27	24	29	24	31	24	33
Romania	25	26	25	26	25	28	25	29
Turkey	26	17	26	18	26	18	26	19

*Obtained from natural indicators of the five main branches within infrastructure (1. Transport, 2. Telecommunications, 3. Housing, 4. Health service, 5. Education and culture)

Source: [4]

There were hardly any changes in the levels of infrastructural development of the individual countries related to one another, and in their ranking, especially between 1974 and 1978. This is evident since the stock of infrastructure is the result of a long historical process in every country, thus significant changes in the stock level can hardly be expected to take place in the short run.

In the middle of the scale, the GDR divides the group of West-European (and North-American) industrial countries from other countries with lower infrastructural scores. These latter are almost exclusively capitalist countries of Southern Europe and

socialist countries. At the same time, the group of countries with the most developed infrastructure comprises the same six countries all along: three Scandinavian, two North-American countries and Switzerland. In the background of this "immobility" however, essential and important movements are to be found.

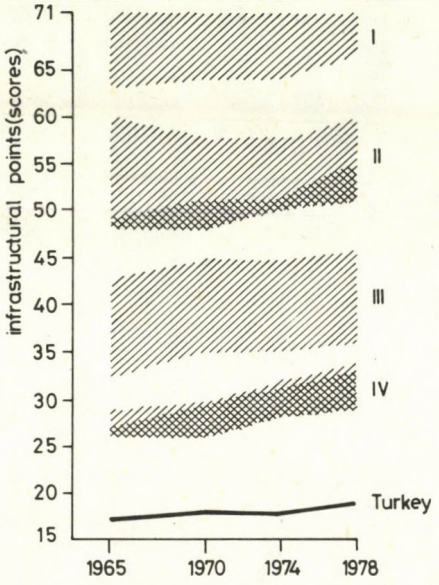
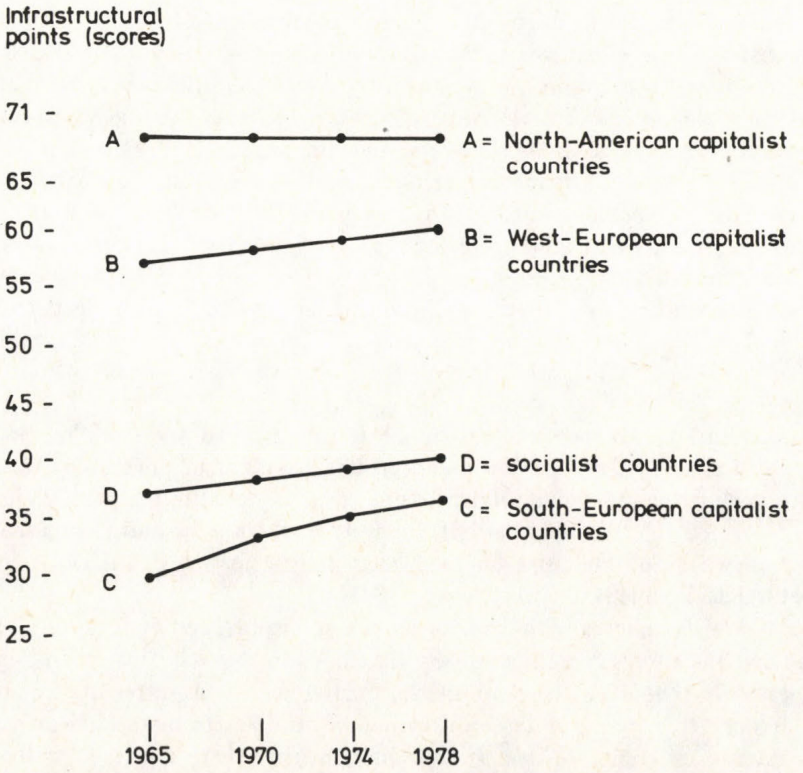


Fig. 1
Groups of countries by infrastructural levels.
Source [4]

As is evident from *Fig. 1,* until 1970, the countries under investigation were relatively evenly scattered in a range of about 50 points on the scale of general infrastructural development. It is striking that by 1978, the countries clustered into well-separated groups (around 70 points, between 50–60 and 35–45 points); this separation of the infrastructural levels is becoming more and more definite. This means that the level of infrastructural development of a given country gets closer to the levels of countries with similar infrastructural development while the gap between the infrastructural levels of countries with essentially dissimilar development widens. Changes in the order among countries occur only *within* these groups, moreover crossing the qualitative borders is likely to become more and more difficult.

This conclusion is further reinforced by the analysis of infrastructural development by groups of countries (*Fig. 2*). In the course of the 13 years examined, the difference (gap) between the general infrastructural levels of two groups of countries (Western-Europe and North-America on the one hand and Southern-Europe and the socialist



Group A: USA, Canada
B: Norway, Switzerland, Sweden, Denmark, Belgium, FRG, the Netherlands, Finland, Austria, Great-Britain, France, Ireland
C: Italy, Greece, Spain, Portugal
D: Czechoslovakia, Hungary, GDR, Bulgaria, Poland, Romania

Fig. 2
*Development of infrastructural level by groups of countries**

countries on the other remained unchanged. At the same time however, the level of infrastructure of the West-European countries approached that of North-America and the group of South-European countries was catching up with the socialist countries. Moreover, in the foreseeable future even the group of the previously most backward South-European countries (among the countries listed here) may overtake the socialist countries. As a consequence of the improving position of the South-European countries the scale more compressed from below by 1978.

In consequence, it is characteristic of the changes in the infrastructural ranking of countries that the rearrangements took place within relatively narrow bounds with the tendency of convergence within the two main groups of countries. This phenomenon is most striking among the most developed countries. It indicates that the North-European countries and Switzerland are moving forward and although the USA has remained among the best, the development of its relative infrastructural level has come to a halt.

Among the 26 countries listed here Hungary was the 19th until 1974 and 20th in 1978. Though Hungary's relative infrastructural level expressed in scores increased to some extent (from40 in 1974 to 41 in 1978), this was not enough for keeping pace with the other countries. Even the sometimes significant development projects realized in certain branches of the infrastructure in Hungary, as expressed also in the increased scores for the given field, could not improve Hungary's situation in the whole of the infrastructure.

International trends indicate that in the future any country that "breaks loose" from its position can only do so by much greater efforts than previously. We do not attempt to analyse the individual infrastructural *fields* in detail in the present study; the available data used for the measurement of levels would not be sufficient for such an evaluation anyway. We emphasize but one characteristic feature of the latest trends in infrastructural development.

The five main spheres within infrastructure (transport, communications, housing, health, education-culture) were not equally developed in the individual countries at the end of the 1970s. (*Table 2*) The most and least developed fields differ from country to country as does the extent of these differences. It follows from the indicator of the so-called relative difference (*Table 3*) that in countries where the level of the whole infrastructure is high, the development levels of the five areas are more even. Scores for the most developed fields of infrastructure are usually 1.5–2 times higher than those for the least developed ones, while in the case of a lower general level of infrastructure, differences in the level of the various fields may be manyfold. This reflects the economic strategy of countries with less developed infrastructure: preference is given to the development of certain fields which, according to international experience, results in a further increase in the relative backwardness of other fields. In the case of a high level of infrastructure the individual fields are usually developed at roughly the same speed. The 1978 indicator of relative differences shows a decreasing or unchanged trend. It indicates that disproportions existing among the various fields did not increase.

Table 2

The scores of infrastructure and its main branches and the order of countries in 1978

	Infrastructure as a whole		Transport		Telecommunication		Housing		Health service		Education and culture	
	Order	Score	Order	Score	Order	Score	Order	Score	Order	Score	Order	Score
Norway	1	71	4	50	9	44	1	96	2	87	3	75
Switzerland	2	70	6	43	1	94	4	80	5	74	14	62
Sweden	3	69	7	42	2	65	3	83	1	88	8	69
Denmark	4	68	5	49	5	56	8	74	4	77	1	84
USA	5	68	1	61	4	57	5	80	17	60	2	82
Canada	6	67	2	57	3	62	2	84	14	62	4	72
Belgium	7	60	3	51	11	43	9	74	12	64	9	66
GFR	8	59	8	41	8	48	7	76	6	70	12	62
the Netherlands	9	59	12	36	6	54	11	67	10	66	6	70
Finland	10	58	10	38	12	42	14	60	3	81	5	71
Austria	11	56	14	35	7	49	12	67	15	62	10	65
UK	12	56	11	37	10	43	6	79	20	56	13	62
France	13	55	9	38	13	35	10	69	9	67	11	65
GDR	14	51	13	35	18	21	13	62	11	66	7	70
Czechoslovakia	15	46	15	35	19	19	17	55	8	68	21	54
Greece	16	46	18	31	14	28	19	54	13	62	24	54
Italy	17	45	19	29	16	26	16	58	21	55	18	58
Ireland	18	45	16	33	15	26	18	55	19	56	25	53
Spain	19	42	21	23	17	24	15	58	24	49	19	57
Hungary	20	41	17	32	20	15	21	44	18	56	15	61
Bulgaria	21	39	22	21	22	14	22	40	16	61	16	61
Poland	22	38	20	29	23	12	23	40	22	55	23	54
Portugal	23	34	24	18	21	14	20	44	26	39	22	54
Yugoslavia	24	33	23	18	24	9	24	38	25	44	20	55
Romania	25	29	26	12	25	6	25	25	23	50	26	52
Turkey	26	19	25	16	27	3	26	22	27	22	27	32
USSR*	–	–	27	9	26	5	–	–	7	68	17	60

*Without total scores because of missing housing data.

Source: [4]

Table 3

*Indicators of relative difference-levels of the infrastructural regions**

Countries in decreasing order of 1965 infrastructural scores	1965	1978
USA	1.3	1.4
Sweden	2.1	2.1
Norway	1.8	1.9
Denmark	1.5	1.7
Canada	1.2	1.5
Switzerland	2.2	2.2
FRG	2.0	1.9
UK	2.2	2.1
Austria	2.3	1.9
Belgium	1.8	1.7
Finland	2.1	2.1
France	2.8	2.0
the Netherlands	3.3	1.9
GDR	2.4	3.3
Czechoslovakia	3.7	3.6
Ireland	4.5	2.2
Bulgaria	8.9	4.4
Hungary	5.7	4.1
Poland	8.3	4.6
Greece	5.8	2.2
Spain	3.5	2.5
Portugal	3.8	3.8
Yugoslavia	8.6	6.1
Romania	12.5	8.7
Turkey	14.0	10.7

*The indicator is the ratio between the highest and lowest scores of an infrastructural region. If the value of this indicator is small, the levels of development of the different branches are more balanced while a high value indicates disproportional development in the five branches.
Source: [4]

Production factors influencing the level-proportions of infrastructure

The performance of infrastructure is determined by the quantitative and qualitative characteristics of its facilities while the level of infrastructure is influenced by production factors, investments and employment connected with the functioning and development of infrastructural branches.

Investments

Infrastructure is famous for being the most capital-intensive sphere of the economy. The volume of infrastructural investments is related much more to structural peculiarities of the economy than to the level of economic or infrastructural development. As is indicated by international experience, the share of infrastructural investments within the total is relatively stable even in the long run. In most of the developed capitalist countries the share of infrastructural investments has been about 50–60 percent of the total, or 70–75 percent with the energy sector included, since the Second World War (See *Table 4*).

In the socialist countries the rate of infrastructural investment within the total is significantly lower than in the capitalist countries: it only amounts to about 40 percent on the average and to about 50 percent with the investments with the energy sector

Table 4

Infrastructural investments as a percentage of the total between 1965 and 1978 without the energy sector

	1965	1970	1974	1978
West-European capitalist countries[1]	45–61	45–59	47–58	43–65
South-European capitalist countries[2]	46–63	45–65	45–56	46–69
Socialist countries[3]	26–43	26–45	29–51	29–46

[1] Belgium, Finland, France, FRG, Ireland, the Netherlands, Norway, Sweden, Switzerland, Great Britain.
[2] Greece, Italy, Portugal.
[3] Bulgaria, Czechoslovakia, Poland, Hungary, GDR, Romania, USSR.
Source: [4]

included. It should be pointed out that in the socialist countries the share of infrastructural investments within the total has not increased but decreased to some extent during the last 20 years. In this respect Hungary considerably differs from the other socialist countries with its larger proportion of infrastructural investments which has been increasing during the last decade. (This question will be dealt with later on when presenting the development of Hungarian infrastructure.)

The volume of infrastructural investments is clearly greatly influenced by the ratio of the GDP or national income spent on investment in the individual countries. In most capitalist countries the ratio of GDP spent on investments showed great stability between the late 40s and mid-70s as did the share of infrastructural investments within the total. Since the mid-1970s however, there has been a drop of 2–3 percent in the ratio of investment within GDP in many capitalist countries. The rate of investment amounted to 20–22 percent of the GDP on the average in the OECD countries in the early 1980s. The North-American investment rate is much lower than that, amounting altogether to 16–17 percent of the GDP.

Similarly, since the late 1970s there has been a significant decrease in the ratio between investment and national income (net material product) in the socialist countries: from about 30 percent in 1975 it fell to 22 percent by 1980.

Taking the investment ratios into consideration, it seems that during the world economic recession of the last decade a decreasing proportion of the GDP or national income was used for infrastructural investments in both groups of countries. It also explains the previously indicated trend of infrastructural stagnation (with the exception of the South-European countries).

The *structure* of infrastructural *investments* also developed differently in the capitalist and socialist countries. Capitalist countries are spending about 10 percent of infrastructural investments on the energy sector. Trade represents about 9, while transport 14–15 percent. About 45–49 percent of the infrastructural investments is allocated to housing and other infrastructural fields (finances, health, protection of the environment, education, culture, state administration, etc.).

In the socialist countries investments in transport are much smaller (10–12 percent on the average), while investments in housing (and all other infrastructural fields) amount only to about 30 percent on the average.

In the past years construction-type investments have strongly decreased in most capitalist and in some of the socialist countries, while investments in machines and equipments have rapidly grown or begun to increase. This indicates new trends of development in both groups of countries: the extension to infrastructure of the acceleration of technological changes in capitalist countries and a slow-down in the expansion of infrastructural facilities and the beginning of a certain modernization process in the socialist countries.

Manpower

In the last decades the proportion of manpower employed in various branches of infrastructure has shown an increasing trend within the total employment. This growth, however, was different in the capitalist and socialist countries, as regards its extent, rate, proportions and sources. (See *Table 5*)

Table 5

Proportion of infrastructural employment in the total employment between 1965 and 1978

	1965	1970	1974	1978
North-America[1]	56–64	61–66	63–67	66–69
West-Europen capitalist countries[2]	38–48	42–54	44–58	45–61
South-European capitalist countries[3]	24–35	32–37	30–40	34–47
Socialist countries[4]	18–36	19–36	21–43	23–43

[1] USA and Canada
[2] Belgium, Sweden, Switzerland, Great Britain
[3] Greece, Italy, Portugal
[4] Bulgaria, Czechoslovakia, Poland, Hungary, GDR, Romania, USSR.
Source: [4]

In the period between 1965 and 1978 the rate of infrastructural employment grew very rapidly in the capitalist countries. The increase in the infrastructural employment accounted for almost the total growth of the labour force: those newly entering the workforce found employment in the tertiary sphere. A parallel process was the transfer of manpower from productive branches to services. This phenomenon guaranteed the growth of infrastructural employment even in countries where total employment decreased.

Already in the 1960s, nearly half of the total manpower in the developed capitalist countries worked in infrastructure. Since the dynamism of the increase in infrastructural employment did not diminish between 1974 and 1978, by the late 1970s the highest proportion of the labour force was employed in infrastructure in most of the developed capitalist countries. Therefore, the labour structure of the developed capitalist region is increasingly bisectoral, i.e. with the decrease of the ratio of agricultural producers to a minimum (4–5 percent), manpower is practically distributed between two economic spheres–manufacturing and infrastructure.

Although to a lesser extent, there have been rapid changes in the, by now economically medium developed, South-European countries: by the end of the 1970s their rate of infrastructural employment exceeded 40 percent.

The labour structure within infrastructure, however, shows a much more differentiated picture. The number of those employed in technology- and highly capital-intensive infrastructural branches–transport and communications–has not changed at all during the last two decades, it has in fact decreased in some countries. The proportion of those working in trade has also remained unchanged. Thus the really substantial increase in infrastructural employment took place in educational-cultural, health, administrative, etc. services, i.e. among those in general government. By now it has already reached the rate of industrial employment (25–35 percent). In the recession period after 1973, the labour absorbing capacity of these activities was of extraordinary importance having a powerful *crisis-mitigating* and *economy-stabilizing* effect regarding manpower too. Without this, there would have been much greater unemployment in the developed capitalist countries already in the mid-1970s.

The relative backwardness of the infrastructural levels of socialist countries is also expressed by the low rate of infrastructural employment. At the end of the 1970s only a smaller part, an average of 35 percent, of the labour force worked in infrastructure in the socialist countries, which was low even in comparison with capitalist countries on the same level of development. The low rate of infrastructural employment is concurrent with a very high and increasing industrial employment (except for Hungary) which is essentially the opposite of the trend in the developed capitalist countries. Although with a considerable delay, in the 1970s the ratio of employment in services began to increase in the socialist countries, mainly at the expense of agriculture. It is also an important fact that the moderate growth of infrastructural manpower has been concentrated in only a few fields of the infrastructure; the increase took place mainly in trade and transport.

Development of labour- and capital-intensity

The development of the two production factors in the various groups of countries is shown in *Fig. 3*. In the developed capitalist countries the ratio of both infrastructural employment and investment was around 60–70 percent at the end of the 1970s. In the socialist economies the corresponding figures are considerably lower, about 40–50 percent; this is partly due to the lower level of general economic development.

The development pattern of the South-European countries differs from those of the other groups of countries in this respect: the ratio of investments regularly exceeds that of the manpower. This very feature is the single most important reason behind the fact that the level and capacity of infrastructure of the South-European countries have developed faster in the past decades than in any of the other groups of countries; the development of the infrastructure *kept level* with economic growth. The fast development of infrastructure had a positive accelerating and promoting interaction with the

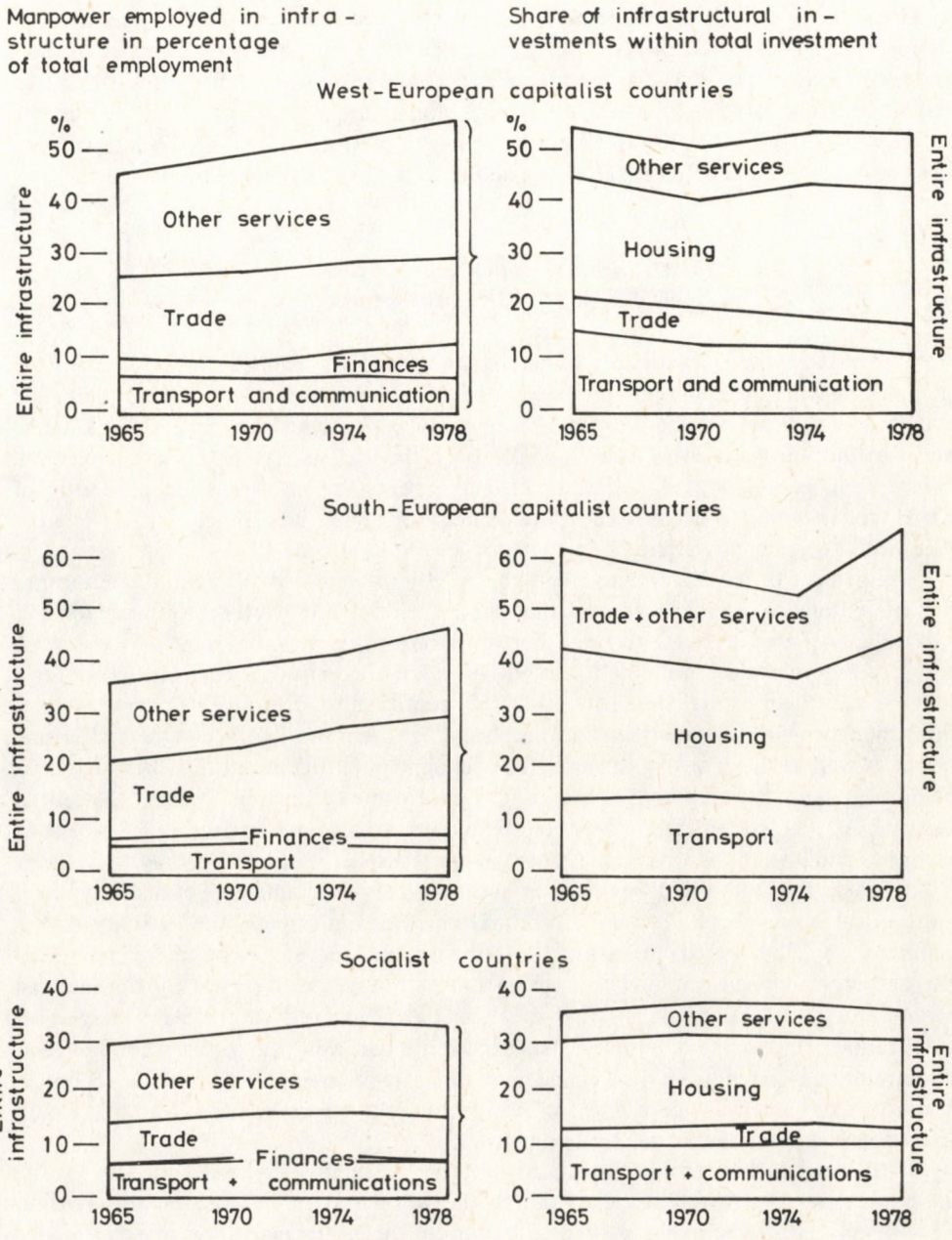


Fig. 3
Production factors in the infrastructure.
Source [4]

development of the whole of the economy. If these countries can keep up this trend in the decades to come, which is not too far-fetched, they will have a good chance to reach the lower level of the West-European capitalist countries. On the other hand, the recent fast infrastructural development and, even more, the possible continuation of the catching-up of the South-European countries will also affect the socialist countries' place in the European order. This is a challenge and an answer has to be given soon.

Infrastructural characteristics of economic policy during the decade of recession

Infrastructural activities were gaining ground in the *capitalist economies* in the period preceding the economic recession. One of the reasons for this was that the higher standard of production, the more and more complex processes of production, marketing and distribution made ever growing demands on the various transport, communication, commercial and social, cultural and personal services, by no means independently of social and political changes. The development of these was closely related to the ambitious government welfare programmes of the 1960s and 1970s.

For most of these activities, profitability criteria were formulated not at enterprise but at national economic level and they were financed not by the private sector and private entrepreneurs having to keep short-term returns in view, but mostly by the state, which provided almost unlimited possibilities for the expansion of infrastructure for a long time. High capital intensity and the profitability features of infrastructural investments made state participation necessary. Furthermore the favourable and lasting boom as well as the resulting accumulated economic potential meant that these activities could be financed through redistribution channels of the national income and the central budget. At the same time, infrastructure played a role in the utilization of excess manpower following the structural changes in the real spheres of the economy.

Beside the undoubtedly positive effects which, in the framework of neo-Keynesian anticyclical economic policy, infrastructural development had on the cyclicity of the economy, by the 1970s the limits of infrastructural development, more and more "separated" from the productive basis in the narrow sense, were clearly outlined. In several infrastructural branches (first of all in those financed by the state budget) an autonomous development evolved, far exceeding the capacity of the economy and structurally separated from real demands justified by the functioning of the economy. There was too much development, and it did not yield the economic results that would have been proportionate to development efforts.

Because of its indirect relations to the productive sphere and the relative unimportance of profitability, even during the world economic recession the dynamic growth of the tertiary sector seemed to be unbroken. On the manpower side this is what actually happened and in most countries the increase of the rate of employment in infrastructure did not slow down but became even more rapid between 1974 and 1978,

while unemployment was spreading in branches hard hit by the recession where a considerable part of the industrial labour force was concentrated.

As to the recent developments, however, we find that in 1978–1980 about 50 percent of the unemployed in the USA and Sweden, and about 35–45 percent in the FRG, Switzerland, Denmark, Belgium and Austria lost their jobs in infrastructural branches; of this, services, in the narrow sense of the term, amounted to nearly the half [4].

In the second part of the 1970s the state's role in infrastructural investments began to decrease because of balance of payments problems [6]; this is also expressed by the decreasing ratio between investments and GDP. The present decreasing trend of investments in infrastructure is in itself very unfavourable, the real level of infrastructural development, however, decreased even more than expressed by the value data on investment. In almost every country, in the socialist countries too, the separation of monetary and real processes is the dominating trend, though to different degrees. Behind the growth of infrastructural investment (at current prices) there is less and less effective infrastructural performance all over the world.

All these factors lead gradually to a reassessment of the economic role of infrastructure and with the budget constraints, the management of the infrastructural and servicing sphere cannot be separated from the productive processes. Besides, the previously characteristic "extensive" growth began to give way to new forms of infrastructural development, mainly in capitalist countries.

Considering the general development trends of infrastructure, it should be pointed out that the level of infrastructural development in the socialist countries is relatively low by international standards, as compared to either the general capacity of their economies or their level of industrialization. All this refers of course not only to the capacity of infrastructure, but also to the level and structure of the production factors of infrastructural development.

Permanent bottlenecks, basic shortages, delayed developments completed after the establishment of production capacities, the development of a kind of "residual principle" have been the characteristics prevailing in the past decades and are still characteristic of infrastructural development in the socialist countries. And this is so despite the urgent and vital need for the development of material and non-material infrastructure which has already been emphasized by the economic decision-makers in almost all the socialist countries at almost all possible party and government levels. Due to the survival and the slow transformation of earlier mechanisms of economic management and the lack of flexibility in planning, a policy of infrastructure development, in harmony with the production basis, is not an integral part of the economic strategies. With the slowing growth and deteriorating economic conditions of the late 1970s the danger has emerged again that short-term tensions of growth and the scarcity of resources will again lead to cutbacks in infrastructure.

In this context one more idea should be pointed out. Although data on both investment and manpower indicate that productive capacities of the socialist countries

have to be satisfied with a lower level and smaller volume of infrastructural "servicing" background, it is obvious that the "modest" demand of the production basis on infrastructure is characteristic only of the economic management of this sphere and not of real demands and situations. In reality the industrial development of the socialist countries was perhaps the most infrastructure-intensive among the present models. This has an important part in the growing infrastructural tensions, shortages and, in general, the low level and inadequate improvement of productivity and efficiency of the productive branches.

From the analysis of real processes it is clear by now* that in all the socialist countries industrialization was based on the mobilization and removal of agricultural labour from villages to towns. International experience shows that this industrial development created and still creates much greater demands on infrastructure and generates greater and longer-lasting tensions than a more balanced industrialization would.

A series of facts indicates that the infrastructure-intensity of the socialist economies is much greater than that of a capitalist country, on a comparable level of development. This means that a quite significant part of the contemporary shortages and tensions is "artificially" created by the given practice of industrial development. This is clearly indicated by the fact that the performances of particular infrastructural services (e.g. transport, health, etc.) exceed those of considerably more developed countries, while there are basic shortages, bottlenecks and, consequently, enormous need for development.

Thus, it belongs to the realistic evaluation of the situation that the present infrastructural backwardness of the socialist countries is a consequence not only of historical inheritance and neglect over the intire process of development and industrialization, but also of the economic structure and system of management, the permanent and growing reproduction of increased demands. The shortages and tensions have already accumulated by now and, due to the slow changes in the present system of management, they do not decrease but are being permanently reproduced [15, 16]

It should also be added, that in the development of the present situation methods of statistics accounting, measuring and evaluating infrastructural costs and performances had and still have a significant part, often misleading economic decision-makers. The price system of the socialist countries is unrealistic (to varying degrees); infrastructural performances are usually undervalued in the national economic accounting systems, several important factors are not included or do not indicate the real processes and volumes because of the various distortions [11, 13]. The picture varies from country to country; there are also new trends and, fortunately, a new kind of infrastructural development and economic management is taking shape in Hungary. The volume of

*Here and in the following we make use of the experiences of our previous research [2, 4, 7, 8, 9, 10] and of the latest Hungarian studies [6, 11, 12, 13, 14, 15, 16] which have proved to be extremely useful.

investments and the changes, labour fluctuation and development efforts indicate that further development might result in a structural rearrangement of the Hungarian infrastructure and in the emergence of a new path of development, better harmonized with economic progress.

The Hungarian economy: effects and conclusions

In the process of catching-up, a considerable progress in infrastructure has been achieved by the Hungarian economy in the last two decades, but especially in the past ten years. Among the socialist countries, the greatest change has taken place in Hungary; here infrastructural development has become an integral part of the economic strategy. In this process quantitative shortages have been reduced, a considerable qualitative progress has been made and backwardness has been made up for. The improvement may be attributed to a greater concentration of investment resources and manpower in infrastructure and to the activities of the so-called second economy in this sphere; the most important single factor was the development of *economic pluralism,* i.e. the creation and co-existence of various forms of state, cooperative, family and private enterprise. The deviation of the Hungarian infrastructural development from trends experienced in the majority of socialist countries may be well illustrated by investment allocated to, and manpower employed in, infrastructure. The rate of infrastructural investment, with the energy sector, increased from 41 percent in 1960 to 50 percent in 1980; this reflects the positive effects of economic efforts aimed at the elimination of infrastructural backwardness.

At present, Hungary is still the only socialist country where the rate of industrial employment is not increasing but, since the early 1970s, has been decreasing and where infrastructure recruits manpower not from agriculture but mainly from industry and of course from among those newly entering the labour force (cf. *Table 6*). However, despite these important and positive facts we have no reason to be satisfied. The increase in the rate of infrastructural investments took place almost exclusively during the fourth five-year plan period (1971–1975), mainly in the so-called non-productive sector of infrastructure and, within this, mainly in housing. Moreover, the rate of investment decreased by 50 percent between 1977 and 1982, the lowest among the socialist countries at present, thus the relatively high share of infrastructure within the total investment covers much smaller volumes and performances than previously. Despite fundamental and important changes in trends regarding the sources of infrastructural manpower, the manpower problems of the servicing sectors have remained chronic.

In spite of the considerable progress, *Hungarian infrastructure is lagging behind* with respect to either the level of economic development or the degree of industrialization and consequently: demand. The greatest problems of infrastructure are caused by the stock of its network elements and the age and obsoleteness of existing stock. The situation is aggravated by the fact that the infrastructural demands of the contemporary Hungarian economy, similarly to the other socialist countries, are greater than those of

Table 6

Changes in the structure of manpower migration in the socialist countries
1960–1981

Country	Changes in percent		
	Agriculture	Industry, with building industry	Services (productive and non-productive)
Bulgaria			
1960–1970	–19.7	+11.7	+8.0
1970–1979	–10.9	+ 4.4	+6.5
Czechoslovakia			
1960–1970	– 7.3	+ 1.1	+6.2
1970–1979	– 4.3	+ 1.3	+3.0
Poland			
1960–1970	– 9.5	+ 5.2	+4.3
1970–1979	– 7.7	+ 3.3	+4.4
GDR			
1960–1970	– 4.2	+1.3	+2.9
1970–1979	– 2.5	+1.5	+1.0
Romania			
1960–1970	–16.3	+10.8	+5.5
1970–1979	–18.2	+13.8	+5.2
USSR			
1960–1970	–13.4	+ 5.5	+7.9
1970–1979	– 4.8	+ 0.6	+4.2
Hungary			
1960–1970	–14.5	+ 9.7	+4.8
1970–1976	– 3.6	– 0.4	+4.0
1976–1981	– 0.2	– 2.5	+2.7

Source: European Committee: Changes in trends and conditions and growth in the 1970s and their long-term implications: centrally planned economies. (Paper of the XVIII. meeting of Senior Economic Advisors. 22.12.1981.)

Hungarian data 1976–1981: Economic Department of the National Planning Office, based on the collection of Gábor *Kepecs*.

capitalist countries at a similar level of development. Shortages and tensions have also accumulated and are being reproduced, though to a lesser extent than in the other socialist countries [15].

Socialist industrialization has brought about much greater demands than a more balanced industrialization would have had. The form of industrial development, the industrial structure and the resulting production organizations (even larger than in some of the other socialist countries) made increased demands on infrastructure.

This situation is well represented by the transport intensity of the Hungarian economy. [2, 15, 16] For example, the Hungarian per capita freight-ton-kilometre indicator was still by about 40–50 percent higher at the end of the 1970s than in the capitalist countries at a similar level of development. The reasons: a poor raw material basis, the settlement-structure of the industry, the extreme size-structure of production and commercial units and finally, the disproportionate transport requirements resulting from frequent shortages. The transport sector is one of the most backward sphere of the Hungarian infrastructure by international comparison. Yet the level of development of Hungarian transport is still less backward than the extent by which the transport-intensity of the economy exceeds what could be considered normal at the given level of economic development.

The need for improving infrastructure was further increased by the practice of industrial settlement followed in the last decades which failed to adapt itself to the infrastructural basis. The settlement of industry in the countryside during the 1960s and 1970s was not accompanied by an overall concept of infrastructural development. Free labour capacity was often the main principle of selection; transport, communications, raw material supply and storing requirements were usually hardly considered.

Over and beyond what has been said, at least three lessons should be drawn from the infrastructural development in Hungary:

1. Several conceptionally erroneous development and modernization projects were realized. These "developments" used up considerable assets without easing real tensions. Let us mention only one of the many well-known examples: instead of building out a uniform telephone network requiring a single really large investment, a wide range of individual specialized telephone networks was created whose development and maintenance costs are much higher than what an up-to-date uniform telephone-telecommunication network would require [7].

2. Taking the limited financial resources into consideration the economic policy has designated so-called areas of priority in infrastructure during the past decade. These areas have indeed developed more rapidly, but this was achieved at the expense of others. Thus, these preferences have resulted in the sharpening of contradictions and tensions between the preferential and non-preferential areas (branches) [8].

3. Owing to regional disproportions a (relatively) statisfactory infrastructural network is at present the privilege, almost exclusively, only of the urban population. In recent regional development concepts this problem has already been formulated, partly in connection with efforts to preserve small settlements.

This recognition, if followed by practical measures, together with decreasing the migration to towns would also ease the burden on urban infrastructure and would mitigate permanently reproducing demands on infrastructural development. On the other hand, it may enable a more favourable allocation of burdens connected with infrastructural development between local authorities, private entrepreneurs and the resources of the population.

The present price and accounting system needs corrections and amendments. From the aspect of a more rational management of infrastructure and infrastructural services, prices proportionate to costs should be applied in a much wider range than at present. *However, the creation of a price structure proportionate to costs can be realized, only if accompanied by fundamental, selectively-applied measures of wages and social policy.* For the increase in the costs of infrastructural services resulting from the introduction of such a price system should be counterbalanced to some extent by an increase in the wage and income level of the population.

Infrastructure can be improved only within the framework of a general economic strategy, and only with the further development of the general reform of the system of economic management. There are heated debates as to the extent and paths of infrastructural development in Hungary; it seems worth emphasizing therefore that the required equilibrium, export-oriented and dynamic development cannot be reached without an adequate background of infrastructural network. The development of infrastructure is a precondition of the realization of the economic strategy and as such, it also contributes to the stability of the Hungarian economy. Infrastructural development is of vital importance in improving the production structure of the economy, in ensuring labour mobility, in tourism, in the export of services, in the marketing and commercial network, in storage, in improving our reliability both at home and abroad, in the maintenance and repair network etc.

This task is made easier by the fact that the import-intensity of infrastructural development is much lower than that of the productive branches and consequently, the easing of accumulated shortages and tensions would not worsen the solvency situation of the country. On the contrary, it would contribute considerably to the economic and political stability.

The development and spreading of *economic pluralism* in infrastructure have brought about several results, some progress was achieved, shortages were made up for and tensions decreased. In the framework of this process, activities of the illegal and semi-legal so-called second economy have been gradually becoming legal, i.e. a part of the "official" economy. Obviously, different areas of infrastructure call for different proportions between state, cooperative, family and private sectors (ownership). It is expedient to promote state ownership in all those spheres of infrastructure, where this is justified by technology, great capital-intensity and/or by the interests of the society and the state while promoting the further spreading of cooperative, family and private small-scale undertakings which evoke genuine owner's identification.

Of course, the further extension of economic pluralism has certain preconditions and consequences; let us mention some of them.

Cooperative, family and private small-scale undertakings have to bring about an increasing accumulation of capital from own savings. This mitigates the state's development obligations and also guarantees the continuity of effective management.

The practice of supporting small-scale undertakings by state loans should be continued.

There is a condition of the further spreading of economic pluralism not fulfilled as yet, namely, that these economic units should be supplied with means of production, materials and spare parts within the framework of the legal trade. The deficiencies in this respect bring about illegal forms and bungling, impede the development of small-scale undertakings and promote corruption.

The authorities should be aware that there is no development without initial mistakes and conflicts; when treating them, the practice of throwing out the healthy baby with the dirty bath-water must not be repeated. Economic pluralism may function efficiently only if these forms of enterprises can reckon with long-term stability.

With the spreading of economic pluralism a greater differentiation of incomes and the accumulation of entrepreneurial profits have to be expected; it is important therefore, that the system of taxation and other measures of redistribution of wealth should be modernized. Income differentiations lead to social problems, contradictions and conflicts, as public opinion is accustomed to "equality". These disadvantageous consequences and contradictions resulting in social conflicts may be compensated for by the stabilizing and tension-mitigating effects of the efficient functioning of the private sector.

Some conclusions concerning the future

Following the changes in the world economy of the mid-1970s and the structural rearrangements of the individual national economies, several previously stable growth trends have come to a halt. Hence one cannot rely on forecasts based on simple extrapolation of previous trends of undisturbed, balanced growth. Moreover, the restructuring of the world economy is not over yet. When forecasting future developments, emphasis should be laid not so much on the quantitative determination of various partial ratios but on underlying trends, often contradictory, which are likely to become dominant in the future.

As to the relationship between infrastructure and the level of economic development, we emphasize, first of all, that changes in the world economy have revalued not only the performances of the economic sphere (in the narrow sense) and of the productive branches, but the performance of infrastructure, providing the background and basis of the economy, as well. This sheds new light on the up-to-dateness and structural development of infrastructure. The performances of several infrastructural branches and establishments have been devalued, development projects of the 1960s and

early 1970s have proved to be over-grown, occasionally superfluous or outdated, while in other areas distortions, considerable shortages and tensions have developed, e.g. in transport and communications, but also in education.

What may be expected with respect to the future development of the overall level of infrastructure? We have absolutely no reason to suppose that any radical rearrangement will take place in the development level and infrastructural order of the individual countries in the decades to come. It is probable, however, that levels of development of the individual countries will continue to get closer to one another, although at a rate slower than in the previous period. Infrastructural changes are also likely to slow down for lack of resources, sharpening tensions as well as problems of equilibrium to be found almost everywhere, which put the emphasis on short-term economic problems.

It can be assumed that the division of countries into separated groups along the development scale of infrastructure will continue. Moreover, the differences between the development levels of these groups may even increase, while some kind of homogenization may only be expected within the various zones of development. International experience shows that the development of infrastructure is an uneven process; at certain stages development slows down.

As to the individual groups of countries it may almost be taken for granted that North-European countries have overtaken the United States with respect to infrastructure, since the development of the latter seems to have come to a halt. The fast development of South-European countries, another dominant phenomenon of the 1960s and 1970s, cannot be taken for granted in the future: the concentration of resources serving as the basis of the previous fast development (first of all investment in the infrastructural network) was no longer possible by the mid-1970s. The previous trend may be continued only if these countries manage to overcome their short-term economic problems and equilibrium difficulties and if infrastructure is given preference in development plans.

The place of the socialist countries in the international order is not likely to change in the future. A spectacular catching-up cannot be expected, all the less, as the European capitalist countries realized further development projects in various infrastructural branches in spite of the economic recession. At the same time, beside supply shortages, socialist countries are also faced with the problems of an obsolete infrastructural network and the resulting higher costs. The economic-organizational structure and management system in the socialist countries make increased demands on infrastructure, as it has already been pointed out. Hence a substantial change in the infrastructure cannot be brought about without further changes in the systems of economic management of the socialist countries. The postponement or slowness of the reforms in the management and organizational systems of the economy have only aggravated the difficulties of economic progress and sharpened the contradiction between the impossibility of further extensive-type economic development and the postponement of thechange-over to genuinely intensive development.

As regards the global share of *production factors engaged in infrastructural branches,* no important changes are to be expected in the capitalist countries. The considerable reduction of development resources, related to short-term economic difficulties and accumulating balance of payments deficits, may of course evoke considerable tensions. Problems of financing, the decreasing role of the state indicated by the reduction from state budgets, infrastructural developments often detached of real economic processes (mainly in the so-called non-productive branches) will obviously bring about essential inner structural rearrangements. This is also supported by the fact that improved competitive positions in the world economy as well as extensive efforts to increase efficiency make it imperative to meet a series of new infrastructural needs. It may be assumed, therefore, that the rate of infrastructural investment will continue to be 60–70 percent in the future, but parallel with the rearrangement of services provided by the state, social and service expenditure will be cut back, while expenditure on the establishment and development of those infrastructural networks and services, which further the efficient functioning of the new productive branches and the improvement of their competitive positions, will increase (e.g. transport and communications, but also education, mainly in professional retraining).

In socialist countries, too, the changes in the world economy and the slow-down in growth of the 1970s aggravated the problems of infrastructural investments, though in an essentially different way. As we have said before, in the socialist countries investments in infrastructural networks and services which provide the background of relatively infrastructure-intensive production capacities are by about 10–15 percent smaller than in the capitalist countries. The cumulative and lasting effect of these two factors, infrastructure-intensive industrial structure and a lower rate of investment in infrastructure, leads to shortages, congestion and wearing out.

The slow-down of economic growth at the end of the 1970s and the beginning of the 1980s increased the possibility that the model of infrastructural development followed for a long time—the so-called subsequent development*—will finally be abandoned. Following the logic of traditional economic strategy, the most obvious solution to overcome short-term economic difficulties is to postpone the highly capital intensive infrastructural reconstruction and development. Therefore, there is a danger that mainly infrastructure will suffer from a restrictive economic policy, especially in investments and this may further increase tensions in various areas.

*The so-called *subsequent* infrastructural development has been characteristic of the European socialist countries since the end of World War II; the general level and the growth-rate of the economy and industrial development considerably exceed the infrastructure in this type of development. For shorter periods, this makes rapid industrial growth possible, especially for countries (mainly socialist) which are already on the path of industrialization and wish to make up for their backwardness as rapidly as possible on the basis of a planned system of objectives. This, of course, leads to bottlenecks in infrastructural conditions which already concretely impede the progress of the economy, much more developed than at the start, not to mention further growth of production and living standards. For more details see the summarizing chapter of [2], pp.154–169.

Analyzing the changes in the manpower situation of developed capitalist countries, the uniform international trend seems to be the stabilization of macro-proportions; we may prognosticate that this will remain so. The following arguments support this view.

As it has already been mentioned, the overwhelming part of the increase in manpower employed in infrastructure, in some countries all of it, took place in services (in the narrow sense), mainly in the number of government employees. However, the widely experienced increase in balance of payments deficits clearly outlined the limits of a further growth of this sphere too. In the years to come, financial resources will hardly be available for the further expansion in this area in most countries, production and social demands do not justify their further development anyway. In several areas (e.g. in education) there was over-development disproportionate to the real demands and structure of the economy; in the future mostly corrective measures are to be expected.

This assumption is also supported by the analysis of unemployment by sex, age and occupation. Unemployment affects first of all women, young people and white-collar workers, hence sections of the labour force likely to be employed in infrastructure and services.

The almost universal problems of employment, however, render a decrease in the share of this sphere unlikely, despite the intension of economic policy. Its macro-structural role is so significant, that the existential security of those employed here has become a political factor of primary importance almost everywhere. What may happen is, therefore, that the previous growth of employment in services comes to an end and assumes a slower increase later.

Similarly to investments, problems related to manpower are of an opposite character in the socialist countries. The ratio of those employed in infrastructure is much too low, manpower has become the main obstacle of raising the standards of infrastructural services, especially in labour-intensive areas.

The low level of infrastructural services has become a seriously restrictive factor in the improvement of efficiency in industry, while the decrease in manpower in the less effective industrial branches is a very slow process. The only way out of this vicious circle is a more consistent enforcement and acceleration of the transformation of the economic-organizational and management mechanism. New paths of growth necessarily require infrastructural services which harmonize with production and industry better. It may be expected therefore that if these conditions are created, the rate of employment in infrastructure will further increase in socialist countries in the future.

As regards the infrastructural development in Hungary, only a rather modest development can be aimed at. Only a few areas can be selected for development, areas which cause the most serious bottlenecks and whose development can be completed during one or two five-year plan periods. For example:

- the build-up and modernization of the storage network,
- a gradual construction of local and agricultural roads,
- modernization of the telephone-telecommunication network.

In our view, these are the most serious bottlenecks and sources of tension at present which could be relatively easily mitigated and where development may be most rapidly realized (possibly with the participation of substantial foreign capital). At the same time, the development of these areas is a necessary condition for the realization of an efficiency- and export-oriented economic strategy.

In the system of Hungarian long-term concepts the plan of harmonized infrastructural and regional development is worthy of attention. According to this plan, infrastructural facilities and servicing establishment to be created and demand to be satisfied would be determined on the basis of the size of the given settlement: at a basic level (villages), at medium-level (larger settlements) and at a higher level (provincial centres and big cities). It would be expedient to introduce this programme in the next five-year plan. Its importance lies in the fact that it would strengthen the ability of villages and settlements to preserve their population, and would promote the joint and simultaneous improvement of a wide range of economic and living conditions. It may contribute, at a time when the standard of living is stagnating or even decreasing, to the sense of public well-being and the increase of social satisfaction and tolerance.

References

1. *Elgondolások az infrastruktúra 2000-ig szóló hosszú távú fejlesztéséről* (Concepts on the long-term development of infrastructure until 2000). OT Távlati Tervezési Főosztály (Department of Long-Term Planning of the National Planning Office of Hungary). Budapest 1983. Manifold.
2. Csernok, A. – Ehrlich, É. – Szilágyi, Gy.: *Infrastruktúra. Korok, országok* (Infrastructure. Ages, countries). Kossuth Kiadó, Budapest 1975.
3. Ehrlich, É.: Infrastruktúránkról, fejlesztésének feltételeiről és irányairól (On Hungarian infrastructure, the conditions and trends of its development). *Gazdaság,* 1977. 2.
4. Csizmadia, M. – Ehrlich, É. – Pártos, Gy.: *Development trends in infrastructure.* UN ECE–UNDP (Geneva 82–20359) 1982.
5. Ehrlich, É. – Szilágyi, Gy.: International comparison of the Hungarian infrastructure, 1960–1974. *Acta Oeconomica,* Vol. 24 (1980) Nos 1–2, pp. 57–80.
6. Muraközi, L.: Folyamatosság és változás a hetvenes évtizedben (Continuity and changes in the 1970s). Budapest 1983. Manuscript.
7. *Az iparfejlesztés és az infrastruktúra kölcsönhatása* (Interaction of industrial development and infrastructure). Elemző tanulmány OMFB (23–7902–Et.) (An analytical study of the National Board for Technical Development – 23–7902). Budapest 1981.
8. Ehrlich, É.: Észrevételek „Az infrastruktúra 2000-ig szóló hosszú távú fejlesztéséről" c. elgondoláshoz (Remarks on the "Concept on the long-term development of infrastructure until 2000"). Budapest 1983. Manuscript.
9. Ehrlich, É.: Development trends in infrastructure. An international comparison. Study for an international conference on the servicing sector, organized by IIASA, Laxenburg 20–22. July 1983. Manifold.
10. Ehrlich, É.: International and Hungarian development trends in infrastructure. Study for the meeting of American and Hungarian economists. Budapest 30th November – 2nd December 1983. Manifold.
11. Dániel, Zs.: Az infrastruktúra értékesítési és mérési problémáiról. (On the marketing and measuring problems of infrastructure). *Gazdaság,* 1979. 4.

12. Dudás, J. – Jasper-Darvas, M.: A lakosság infrastrukturális ellátását szolgáló beruházások (Investments serving the infrastructural supply of the population). *Statisztikai Szemle,* 1982. 1.
13. Hoch, R.: Az infrastruktúra fejlesztésének szükségessége (The necessity of infrastructural development). *Gazdaság,* 1982. 4.
14. Simán, M.: A szolgáltatások egyes gazdasági kérdései (Certain economic questions of services). Budapest 1982. Candidate's dissertation. Manuscript.
15. Major, I.: Az infrastruktúra és a gazdasági fejlődés néhány összefüggése a magyar gazdaságban (Some relationships between infrastructure and economic development in the Hungarian economy). Budapest 1983. Manuscript.
16. Major, I.: Tensions in transportation and the development level of transport in some socialist countries. *Acta Oeconomica,* Vol. 30 (1983) No. 2, pp. 221–240.

ИНФРАСТРУКТУРА В КРИЗИСНОЕ ДЕСЯТИЛЕТИЕ

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В статье прослеживаются в свете сдвигов экономической политики «кризисного десятилетия» 70-х годов изменения, происшедшие в развитии инфраструктуры. С целью характеристики международного уровня развития инфраструктуры авторы сообщают важнейшие результаты международного сопоставления, проведенного в отношении четырех лет (1965, 1970, 1974 и 1978 гг.) последних двух десятилетий. В уровне развития инфраструктуры стран по отношению друг к другу, а также в занимаемых ими в этом отношении порядковых местах почти не произошло изменений, в особенности — в 1974—1978 гг. Анализируя уровень развития инфраструктуры по группам стран, можно видеть, что уровень инфраструктуры западноевропейских стран приблизился к уровню инфраструктуры Северной Америки, а уровень южноевропейских стран достиг уровня развития группы социалистических стран. Наиболее разительной переменой является улучшение позиций южноевропейских стран. Среди стран, стоящих во главе ряда по уровню развитию (три скандинавские, две североамериканские страны и Швейцария) наблюдается значительное выравнивание уровней, что вытекает из того, что США, хотя и продолжают занимать одно из первых мест, задержались в относительном развитии своей инфраструктуры. В тех странах, где уровень развития инфраструктуры в целом высок, развитие ее пяти областей (транспорт, связь, жилищные условия, здравоохранение, образование) более равномерное, из чего можно сделать вывод о параллельном развитии отдельных сфер инфраструктуры в этих странах.

К концу 60-х годов в развитых капиталистических странах на долю инфраструктуры приходилось как по численности занятых, так и по капитальным вложениям примерно 60—70%. В экономике социалистических стран, отчасти из-за среднего уровня экономического развития, доля рабочей силы и капиталовложений ниже и составляет около 50—50%. В южноевропейских странах доля капиталовложений систематически превышает долю рабочей силы, и этим объясняется тот факт, что уровень развития инфраструктуры и ее выпуск в южноевропейских странах развивались в последние десятилетия быстрее, чем в какой-либо другой группе стран.

Уровень инфраструктурного развития социалистических стран относительно отстает как от уровня их экономического развития, так и от уровня развития промышленности. В условиях ухудшения экономического положения не исключена опасность, что дефицит ресурсов попытаются вновь восполнить в ущерб развитию инфраструктурных областей. Отрадно отметить, что в Венгрии намечается новое, отличное от прежней практики, развитие инфраструктуры, которое может привести к формированию траектории инфраструктурного развития, более гармонирующей с экономическим развитием.

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LASTING ELEMENTS AND CHANGING CIRCUMSTANCES IN THE HUNGARIAN AGRARIAN DEVELOPMENT

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In recent decades the successful agricultural policy has had a favourable effect on the social and economic life of the country. The article presents the following permanent elements of agricultural development: changing working and living conditions of peasants, material and technological development, major elements of economic management, the rational combination of large-scale and small-scale production, cooperative policy and the flexible adjustment of enterprises (cooperatives). The author shows all these elements under changing circumstances and in the context of a dynamic development. In this way he also makes major trends of development perceptible. He emphasizes that under the new circumstances a further development of enterprise behaviour is also indispensable, together with that of economic control and management.

The fruitful agricultural policy, ie., the beneficial implementation of this policy, has been one of the major resources of socio-economic achievements in Hungary in recent decades. In the following I should like to present the lasting elements of this policy. My objective is to make these elements serviceable for the purpose of formulating the main line of economic policy on a longer range, with due regard to changing circumstances.

Achievements–chances

Agriculture has belonged to the dynamically developing sectors of the Hungarian economy ever since the mid-sixties. Previously, for several decades, its production used to increase by not more than 1 or 1.5 percent a year. In the mid-60s it increased by yearly two percent and in the second half of that decade by yearly 2.8 percent. Between 1971 and 1975, the annual growth rate of agricultural production amounted to 4.6 percent, while between 1976 and 1980 it was 2.5 percent. During the past decades this enchanced production was achieved with a diminishing cultivated land area and a decreasing workforce but with substantially growing investment, that is, clearly by way of considerably more intensive farming and with higher labour productivity. Under private farming an active agricultural earner was capable of producing food for the needs of five or six persons. Now he is capable of producing twice more, on a higher level and in a bigger variety and, besides, he exports a still larger volume. From the point of view of society this is an obvious advantage since a smaller workforce is engaged in food production and more working hands can be engaged in other useful activities.

However, the rapid growth of gross output between 1970 and 1980 entailed negative consequences as well. The rate of increase of material inputs and depreciation costs was higher than the rate of gross output and so the growth of net output (national income) was moderate. Typically, while production inputs increased between 1970–1980 in the total agricultural activity by 87.5 percent, net output only increased by 25.6 percent. In sectors other than the basic activities this rate was much more favourable as the growth rates were 126 percent for production input and 84 percent for net output. In the first half of the seventies the trend of net output was more advantageous than in the second half and state farms scored better results than cooperative farms. Considering the whole decade, the annual growth rates were as follows: total agricultural net output 2.3 percent in cooperative farms 4.3 and in state farms 6.7 percent.

The Hungarian agriculture has for a long while discharged a double function. It covers domestic food consumption on a fair level which doubled in 25 years in terms of per capita consumption. At the same time, together with food industrial production, it also multiplied its exports, completed with an active balance of trade which contributes to the resources of the national economy. Food export was three times more and the surplus three and a half times more in 1982 than in the year 1970. Between 1972 and 1982, agrarian foreign trade increased its surplus by yearly ten percent and within it its balance of non-rouble trade by yearly 15 percent.

The dollar earning capacity of the Hungarian agriculture and food industry is of particular importance for the national economy. The share of this sector has been for long over 30 percent in non-rouble exports and around 15 percent in imports. That is, the balance of the non-rouble trade is favourable.

The question whether the agriculture, especially after its reorganization, has alleviated the problems of the Hungarian national economy, must be given a firmly positive answer. This statement is also supported by the fact that the budgetary subventioning of agricultural and food production has substantially decreased in the past decade.

The contribution of the agriculture is thus favourable to food supply which is of eminent importance from the point of view of political stability, as well as to the shaping of the foreign trade and budgetary equilibria which determine economic development in Hungary.

The acievements of the Hungarian agriculture also stand the test of international comparison. Between the two wars and in the 1950s and 1960s, the Hungarian agriculture could not manage to acquire a better place than the 17th or 18th in the list of European countries for a long time. In the 1970s, it was placed 1st to 4th with respect to several indicators. By the end of the decade the Hungarian agriculture shared the top places with the Netherlands and Denmark with respect to the value of per capital gross output and growth rate. In 1980, per capita cereals production amounted to 1.3 tonnes which was only topped by the Danish indicator (1.5 tonnes) in Europe. Also with respect to the volume of per capita production of pork, poultry, eggs and apples, Hungary was at the top of the European list. In the average of 1971–1978, the value of agricultural output per

one hectare of agricultural area was five times the world average, three times the CMEA average, and 70 percent of the average recorded in West European countries. On the basis of the value of agricultural output per one hectare of arable land, garden, horticultural and viticultural area combined, we are now the 12th, as against the earlier 17th, from 26 countries. The lower share of animal products in the value of agricultural output (50 percent in Hungary vs. 60 to 80 percent in countries ahead of us in the list) and the lower standards of production on arable land, account for our not being better placed despite of a number of outstanding achievements.

According to academic studies and estimates in the late seventies, plant production could be increased till the year 2000 by 80 percent with a proper utilization of agroecological potentials if the necessary conditions (assets, competent workforce, etc.) are provided. However, the extent of development is *ab ovo* pegged by the given economic possibilities and conditions. Taking a realistic account of conditions not more than a yearly 2 percent growth can be prognosticated for the development of agricultural production in Hungary in the 1980s. Any additional increase can not be reached but by substantial investments in animal production which is unrealistic to plan at present. As against one-sided quantitative expansion, economical expansion of production, less costly development and running with smaller asset, energy and industrial material requirements, and the raising of labour productivity should be accentuated.

There are also other reasons why it would be of no avail to cherish illusions about the development and economic role of the agriculture. True, conditions in Hungary are favourable for agricultural production and so are, mostly, the experiences. However, the agriculture and food industry, producing the smaller part of the output of the economy and of the national income, cannot substitute for the role of all the other sectors that outweigh the agriculture. This is the same in every industrial country. It is another fact, however, that in the advanced industrial countries also the agriculture is advanced and wherever conditions are favourable (such as in the United States and France), agricultural exports are considerable. It also belongs to facts that in the world market, for the time being and despite the recession, the price of basic raw materials and primary energy is high whereby the costs of food production are greatly increased, too. The exporters dominating the agrarian world market enjoy monopoly position and subordinate the food trade to their strategic interests. The major items of Hungarian agricultural exports are cereals and meat, earning most of our dollar receipts and selling in a balanced way. A part of our exports, however, is exposed to the fluctuations of the capitalist markets where it must cope with powerful competitors and discriminative measures. For example in 1982, for the same amount of dollars received, we had to export nearly ten percent more goods to the non-rouble markets. Again, food exports to the socialist countries and to the developing countries are limited by liquid demand.

The above realities must be taken into consideration when the future path is determined. It is not incidental that scientific research workers and planning organizations are more and more concerned with studying the feasible and rational degree of making use of the Hungarian agroecological potentials in the medium and long term. The

following conclusions derived from research work and experiences, and which can be now safely stated, are hoped to help decision:

a) Continuous supply with food of good quality and adequate variety is an indispensable condition of political stability. This in itself necessitates development for the purpose of smooth supply and for steadily improving quality in the agriculture as well as in attached sectors like refrigeration, storage, processing, packageing, circulation).

b) At present 70 percent of the Hungarian agricultural output is used in the country and 30 percent is exported. However, most of the increment is exportable. Missing this opportunity—in fact the agroecological potential—would be a failure which no other development could substitute and compensate for in the foreseeable future. That is, we actually have no choice. It is already predictable that, for the time being, we are not in a position to forgo the increasing of food exports even temporarily, since we have nothing to substitute for it. Even if the exports of the industry appreciably surpassed the present volume, this would have to serve the expansion of total exports in the interest of balanced growth and the raising of living standards—and not the replacement or substitution of competitive agricultural and food industrial exports. The reverse holds, too. The increase of agricultural exports does not render industrial development unnecessary and does not substitute for the promotion of industrial exports.

c) There is tough competition for the export markets. The world-wide agro-protectionism and the problems of our foreign trade with the CMEA countries notwithstanding, we are not in the position to give up the increasing of agricultural exports. According to forecasts, in the future the socialist countries will be even more important absorptive markets of Hungary especially if price relations also change favourably, that is, if we can export as much as now or even more for hard currency and hard goods (oil, energy, raw materials) and can gain comparative advantages. At best, we can maintain our established agricultural exports to the advanced Western countries. Better marketing work can promote our position in the liquid developing countries. Success will not come easily there either. We must therefore do our best to improve marketing work, to acquire new markets, to keep the old ones and to be successful in them.

d) It follows from the above that the development of food production is determined firstly by the export opportunities and, thirdly, by the need to improve the export-import balance. This is no longer a debated issue in Hungary. An issue is, on the other hand, the degree of development and in its discussion real and fictitious interests are clashing. For example it is a frequent argument that export-oriented agricultural and food industrial development draws away resources from industrial development for similar purposes. The two must not be set against each other. Up to now our resources have not narrowed but expanded along with the increase of agricultural exports, and so did the resources used from them for the purpose of industrial development. That is, the development of agriculture was carried out in the service of general economic growth and of improving equilibrium, and the same is expected to happen in the future.

The role of the human factor

All that the agriculture has scored through the past decades in Hungary is the result of several factors. One of the most essential ones is *the profound improvement achieved in the life of the peasantry and in winding up rural backwardness.* The Hungarian Socialist Workers' Party and the Hungarian Government took measures, already at the time of putting down the counter-revolution of 1956, eliciting the confidence of the working peasants. The system of compulsory delivery was abolished and commercial methods were introduced instead. Agricultural producer's prices were simultaneously raised and taxes decreased. The pre-1956 errors were publicly disapproved of together with the forced organization of cooperatives, and the grievances were redressed. Substantial subsidies were given to state farms and agricultural cooperatives to recover and, at the same time, also assistance was given to the production of private farmers and to improve their financial situation.

The Hungarian Socialist Workers' Party and the Hungarian Government observed this policy also in the stage when the cooperative farms were organized, and carried it on in the 1960s when the gradual levelling of differences between the incomes and living conditions of workers and peasants was declared as an objective.

In the early 1960s when large-scale farms were organized, the real income of the peasantry was by 15 to 17 percent less than that of workers and salaried employees. Following the measures effected in the middle and in the second half of the 1960s, as a result of the rapid increase of the incomes of cooperative farms, this difference vanished and peasant incomes reached the level of urban workers and salaried employees. All this was closely linked to the growth of agricultural production and to the rise in the incomes and living standards of the urban population.

In the 1970s the social conditions of the Hungarian cooperative peasantry, their benefits from pension, family allowance and health care, underwent a historical change. At present several hundred thousands of cooperative peasants are granted pensions, old-age rents and social benefits. As an enacted right of every Hungarian citizen, they are covered by health care.

Today the working and living conditions of the Hungarian agricultural workers and cooperative peasants are not worse than in the advanced industrial countries. This is strongly influenced by the profound improvements in schooling, culture and professional training. One-seventh of the active workforce in state farms and agricultural cooperatives possess secondary school or higher qualifications and one-third of them are skilled workers. With the change of generations, a far more civilized and qualified workforce replace the old one whose way of thinking, living circumstances and aspirations are more and more identical with those of industrial workers and urban people. The transformation of the village, the modernization and better supply of settlements, that is, the advance of urbanization, are integral parts of the process.

Major material and technical conditions

It is reasonable to stress the following conditions supporting the raising of the standard of production and the development of the structure of production;

a) It is a responsibility towards the coming generation to *preserve the cultivable land,* this significant and irreplaceable element of our national wealth, and to *maintain and improve its productive capacity.* In the 1950s the arable land area decreased by 210 thousand hectares, in the 1960s by 260 thousand and in the 1970s by 310 thousand hectares. The decrease by 240 thousand hectares which the productive land area suffered only between 1975 and 1980 can be safely treated as a loss of exports of $ 230 million at the prices of that time.

In the future the land act will have to be more rigorously enforced and also other measures will be required to slow down the decrease of land. Industrial and urban development planning and the location of water management and other edifices, agricultural plants and roads will have to be done in a more circumspect manner. Areas suitable for economical agricultural production will have to be reclaimed. The requirements of environmental protection have to be met more consistently.

In Hungary 75 percent of the soil, ie., 5.5–6 million hectares is deficient to some extent, in half of it there is water deficit, a considerable part suffers from severe erosion and thus needs *amelioration.* On these areas of large-scale farming, country and water planning and investments in soil protection and soil amelioration are required. A better utilization of the ecological potential demands from us to use the existing *irrigation* networks according to needs, to expand them, and also to apply solutions that generally do not necessitate surface buildings (layered cultivation of hilly areas, double-purpose draining). However, the growing costs of irrigation are not returned at present from the receipts it can produce. Short of investment funds, the building of new irrigating capacities cannot be but a desire. It is therefore advisable to reconsider the present state of affairs and to encourage the large-scale farms also through economic regulation since the competent and economical carrying out of water planning and soil amelioration–and their substantial promotion which became justified in the 1980s as against the previous decade–are closely connected with the possible volume and quality of production.

Areas unsuited or not well suited for agricultural production can be used for the purpose of forestry. On half of the 1.3 million hectares of lawn area, more intensive farming is required.

b) In scientific and technological progress, after the socialist reorganization of the agriculture Hungary has come abreast with the agricultures of the economically advanced countries. For example the technology of grain production is approximating that of the most highly advanced countries. It is imperative also in the future that the Hungarian agriculture keep pace with the predictable scientific and technological progress of the economically advanced countries and contribute to attaining new scientific results in certain areas, especially in the biological sciences.

With the intensive development of cereals production, higher requirements are set to species. Successive substitution of species will be needed to increase potential productivity and to make proper use of it. In animal breeding the main effort is aimed at improving the efficiency of feedstuff transformation.

c) *Technical-technological updating* is another important source of enhanced agricultural achievements. In the main branches the large-scale farms are already provided with the most essential conditions needed for up-to-date production, such as high productivity species, most of the necessary machines, fertilizers, plant protectives and other materials and equipment they need. In terms of machines and equipment, the stock of the Hungarian agriculture is twice of that in 1960, a considerable part of the prime movers and machines are up-to-date heavy-duty ones, and also the use of fertilizers can be increased in accordance with needs. Thus the development of production in the coming years is well based and this base will be further expanded in the coming years by the implementation of the intensive cereals programme, the amelioration programme and by the import of western machines and parts.

In the technological development of the agriculture, a more powerful support must be given to technologies with more moderate capital, energy and industrial material requirements. In comparison with earlier times it is less imperative to replace live labour by technology and especially in fields where the relative costs of live labour *vs.* embodied labour do not justify it. In their choice between alternative development projects researchers and the large-scale farms will have to pay more attention to the actual conditions of the area and the farm and to the profitability that can be attained with the given price and cost conditions. Also the linking of agricultural with processing industrial research and development will predictably become more important. As a matter of fact the qualitative parameters of the agricultural raw materials determine the profitability of processing and the quality of the finished product.

It is an additional problem that beside the extra capacities required for quantitative growth, financial and technical foundations must also be provided for the higher quality, range of choice and efficiency of production. This will be increasingly important in the 1980s since the utilization of by-products and even the periodical exploitation of reserves offered by feed-stuff management are absolutely impossible without technical-technological development.

With the growing export orientation of agrarian production failure of the "background" industry is an increasingly acute problem in Hungary. The machine and technology requirements of development for export purposes cannot be satisfied but from the Western markets, but this faces difficulties at present and in the coming years. A rapid development of the domestic industry on the basis of up-to-date technology could be a solution. This task is particularly pressing in the following fields: production, or coproduction of up-to-date sowing, soil cultivating and plant protective machinery of cereals production; production of machinery and equipment suitable for the processing and utilization of big volumes of by-products of agricultural production; and in the field of developing storage and food industrial processing.

One example be given to illustrate the importance of the utilization of by-products: according to academic studies related to the agroecological potentialities, in Hungary about 40 percent of field plants are main products, 30 percent root and stubble remains while another 30 percent by-products (calculated in terms of energy content). By-products can be used, beside improving soil fertility, for feeding, transformation into thermal energy as well as valuable raw materials for the purpose of numerous industrial activities. Such utilization needs, however, intelligent investment and technological development.

The use and sale of actual products and conservation of their quality also presuppose investment and technological development. It has become a growing danger that the expansion of agricultural production is barred by the backwardness of the tertiary sector, eg. lack of storing (for example apple storing) capacity as well as the state of the food industrial capacities, the shrinking development funds of processing companies, and the frequently limited (road and rail) transport capacities.

Economic autonomy–financial incentive

The assertion of *economic autonomy and financial incentive* through the rationalization of economic control, and particularly of the system of regulations, has been another standing element of the dynamic agrarian development of recent decades.

The general reform of the Hungarian economic control and management system started in 1968 had been preceded by ten years by measures serving the development of agricultural control (planning, economic regulation and the organizational system). Abolition of the compulsory delivery system provided a ground already from 1957 on for the gradual elimination of the direct type of control based on breaking down the plan. In Autumn 1956, along with the abolition of the compulsory delivery system, the compulsory sale for private and cooperative farms, and also the compulsory sowing for the private farms was ended. Between 1959 and 1961, the overwhelming majority of the Hungarian peasantry joined cooperative farms, and collective farms became predominating in the agriculture. In the new situation, the government further developed the agricultural control methods and the indirect instruments of influencing production, namely, the price, tax, credit and subsidy policies, and the new system of trade in products gradually gained ground. As from 1957 on the machine stations changed over to autonomous enterprise management, and later on were transformed into machine service stations and sold their machinery to the cooperative farms. Since 1957, the number of compulsory plan indicators was radically cut in the state farms and profit sharing was gradually introduced.

In the mid-sixties the preparations for the general reform of economic control and management started and the improvement of agricultural control was concerted with it. In the agriculture several measures were effected already before introducing the reform in 1968: in 1966, producer prices were increased by nine percent (to be subsequently

increased by ten percent at the end of 1967 and the beginning of 1968), and with the effect of January 1st, 1967, the government annulled most of the cooperative farms' debts, up to the amount of 13 billion forints.

With respect to its economic content, the reform *served the financial establishment of enterprise autonomy and expanded reproduction* through the repeated and substantial raising of producer prices, through the system of subventions equally assisting development and continuous running, the credit system, the system of financial regulations (taxation, formation of enterprise funds, wage system) controlling the accruing and using of enterprise incomes, and through the regulation of the trade in products. Before the reform only a smaller part of the large-scale farms had been able to afford the expansion of production from own resources–while after the reform this opportunity is open for every farm. The assertion of economic independence, together with the required financial resources will remain an important motor of development.

The security of and interest in production and sales are lasting characteristics and requirements of the development of agricultural control. Production cannot be made independent of the weather and climatic conditions even in the most advanced agriculture. It must therefore be assured that the security and interests of producers be increased and not decreased by economic and political conditions under the influence of the government.

Smooth supply with production equipment, materials and parts is one of the major ingredients of security. It follows that in the development of agriculture, much greater attention should be paid to organizing the trade in the means of production. This must be strongly emphasized especially as the supply with means of production has been one of the weakest points of the Hungarian agriculture.

Smooth sale is another important factor of balanced farming. It happened more than once in Hungary that the production of several kinds of staple foodstuffs was thwarted because of marketing difficulties. It is therefore necessary to study the possibilities of the long-range development of the established system of contracting. Recommendable solutions should be based on the *mutual interests of producers and dealers* in both purchases and sales. Bureaucratic attitudes and methods should be replaced by commercial behaviour, pursued as profitable business activity. This trend should also be followed in the development of foreign trade.

It is a similarly essential feature and a principle of the mechanism of agricultural control to boost enterprise initiative and to apply at the same time economic control, using the price and monetary system and income regulation, so as to *link financial incentive to economic results, that is, to the lucrative increase of production.* Both the enterprise and the individual interests are durably based on this principle. Producer prices of a growing number of products are differentiated by quality, and subventions and credits are conditional upon growing production and returns. The remuneration of workers and managers, their financial stimulation are more and more closely associated with the results of production and business management. That is, the economic control works for the best possible coordination of enterprise and individual interests. It tries to

put enterprise and cooperative funds as well as individual ambitions at the service of social objectives through economic regulation and state subsidy.

Observance of the voluntary principle and gradualness, as well as the combined use of advanced and traditional methods also belong to the lasting principles and features of the Hungarian agricultural policy. This is reflected by the numerous versions and varieties of enterprise concentration, agroindustrial integration, organizational forms, intra-enterprise ways of organization and distribution applied by the farms in accordance with the state of development of their forces of production and conditions. The government helps their application by issuing guidelines. The pushing of centrally specified schemes has been unknown in the Hungarian practice since 1956. Overcentralization would not help the rational utilization of local possibilities and conditions. In agreement with this policy, the combined use of traditional and advanced means and methods associated therewith must not be given up in the future agriculture either.

In the furthering of economic control, far more attention is to be paid to the renewal of the internal enterprise mechanism than what it has so far received. It is a fact that, in a sense, the reform of economic control came to a halt at the door of trusts, enterprises and cooperatives, and has not penetrated the life of large-scale units, not even in the agriculture where its achievements are the best. Beside several other reasons, it has been a particularly important reason that for a long time the development of the internal mechanism was restricted to issues concerning the levels of management and the organization of management and was not properly linked to the autonomy of organizations actually pursuing business and to the encouraging of enterprising through wages and remuneration. Science is also to be blamed because it failed to notice the new symptoms of the enterprise and cooperative routine. As a matter of fact, the large-scale farms did from the first moment seek solutions to connect internal organizational development and financial incentive. Furthermore, they have always given preference to forms suited to practical objectives and local conditions, and combined traditional ways with up-to-date methods. Practice has produced a big variety of forms. In the beginning family farming or cropsharing was very widely applied while lately the *so-called small teams, enterprise divisions and sections with autonomous scopes and interests have been spreading.* Also subcontracting and lump-sum systems are more and more widely used. It is essential here to consistently observe enterprise autonomy, voluntary will and gradualness. If centrally specified forms were demanded, local initiative and the rational utilization of conditions would suffer a setback.

The development of the internal enterprise mechanism deserves attention also because this is the way to lay the grounds for the further strengthening of enterprise (cooperative) democracy.

The decisive role of large-scale farming and the big variety of organizational structures

A durable basis of the Hungarian agricultural achievements is the *socialist large-scale production,* complemented by the household plots and auxiliary farms as well as enterprise associations.

In the early 1980s 130 state farms, 1320 cooperative farms, 61 specialized cooperatives and 900 enterprise (large-scale) associations were operating in the agriculture. At the beginning of the 1960s, after the organization of cooperative farms had been accomplished, there were 270 state farms, 4200 cooperative farms and over 400 specialized cooperatives in Hungary. At that time the average area of a state farm was 3700 hectares and of a cooperative farm 1100 hectares. The number of small-scale producers including household plots was over 1.6 million and in 1981 1.5 million, half of them being the household plots of cooperative members and half of the auxiliary (complementary) farms of workers and other employees. At present the average area of state farms is 7600 and of cooperative farms 4000 hectares. The average area cultivated in household plots is three-quarters of a hectare and of auxiliary farms half a hectare.

Associations between state enterprises and cooperative farms have become common in recent years. At the end of 1981, most of the associations functioning in the Hungarian national economy, ie., nearly 900 associations, worked in the agriculture. There are also four agroindustrial unions. The production systems are particularly successful. Production systems were organized in 1981 on 85 percent of the maize area, on three-quarters of the wheat and sugar beet areas, on the whole of the rice area and on 44 percent of the orchard area. Production systems are applied by all large-scale establishments of poultry and egg production, two-thirds of pork farms and half of the cow farms.

The basic pillars of the development of the Hungarian agriculture are *the socialist large-scale farms, the state farms and the cooperative farms* working on more than 92 percent of the cultivated land area and giving two-thirds of agricultural output. Owing to their faster development, their share is expected to increase in the future. In the second half of the 1970s agricultural production increased by 12 to 20 percent in the large-scale farms as against 7 to 8 percent of the household plots and auxiliary farms.

The state farms and cooperatives carry on concentrated production on large areas of land. Their average land sizes, especially in the case of specialized production, are in most sectors suited to applying advanced technology. No considerable and especially not an accelerated concentration of enterprises is needed for the better utilization of technology even in the long run.

With the decisive predominance of large-scale production, a considerable role is played in Hungary by small producers. The cooperative household plots as well as the auxiliary farms of workers and other employees give one-third of the total agricultural output. Small-scale production is, however, integrated in Hungary by the large-scale cooperative farms and by other socialist organizations (state farms, consumers' cooperatives). One of the widely applied forms is the system of contracts signed for

household-plot production. In its framework, the large farms provide the animals, feedstuff, machine operations and other services required for household-plot farming and the crop fixed in contracts is sold by the large-scale farms. The value of their services is discounted from price receipts and the rest is paid out to small-producers. Most cooperative farms carry this out by organizing household-plot production as a separate branch of production, under the control of competent experts. Other large-scale farms organize specialized teams for the production of a given product and, in addition to their own workers, anybody engaged in small-scale production may participate. The most common ones are the special teams for the breeding of small animals (rabbit, poultry, pigeon, bee) and for gardening (production of vegetable, fruit, grape, mushroom). Their main tasks include the procurement of materials and equipment required for production and the organized marketing of products.

This big variety and versatility is an important source of success and it is expected to be preserved. The Hungarian Socialist Workers' Party and the Hungarian Government wish to carry on this successful combination of large-scale and small-scale production, with the predominance of large-scale farms.

The Hungarian cooperative policy

In the socialist countries the up-to-date large scale agriculture is at the same time cooperative agriculture. Consequently, agricultural development requires a right cooperative policy. Cooperative policy is therefore a cardinal constituent of the Hungarian economic policy.

The cooperative policy covers a broader range than the agricultural policy since cooperatives function successfully not only in the agriculture but also in industry and trade and in services for the population.

In the early 1980s the cooperative members numbered more than four million. Even if double–or multiple–membership are considered (that is, that many members of cooperative farms are at the same time members in consumers' cooperatives or savings cooperatives as well), it still holds that a considerable part of the adult population is directly attached to the work of cooperatives. Indirectly, even more people are affected by the activities of the cooperatives.

On this basis the importance of cooperatives can be summarized as follows:

a) The cooperatives solved a historical task by guiding small-scale production (peasant farms, private craftsmen and retailers) to the socialist path. More than one million citizens engaged in agriculture, industry and trade actually work in cooperatives. The cooperatives are the main source of their living and, at the same time, they play important roles in public supply and exports. The importance of their role for the national economy is substantial.

b) Through cooperative collaboration, the central funds available for economic development can be increased. Comparatively large groups of the population are

willing to make direct contribution in the form of money, by working or in other ways to the cooperative organizing of such activities as are likely to result in a quicker and better satisfaction of their demands. It is therefore reasonable to organize the collaboration of those actually concerned in cooperative form whenever live labour and the employment of the workforce is decisive in business management, and whenever the economic objective is to serve the interests of a relatively smaller community.

c) The cooperatives are suitable frameworks for the large-scale organization of agricultural production and in the spheres of industry and trade they usefully complement the strongly concentrated state industry and trade. They are capable of discharging certain tasks and with good efficiency and agility which the specialized large-scale enterprises refuse and which satisfy public demand. This advantage of theirs is related to such conditions of small-scale and medium-range businesses as the smaller apparatus of management and administration, quicker response to demands, and quicker shifting of activities especially when it is based on a considerable amount of manual work or when it involves simpler inputs.

d) The social and socio-political acitivities of the cooperatives also are significant and they are usually connected with economic activities. The tasks they solve also are irreplaceable in many cases in the employment of women, of persons with reduced working capacity, as well as of housewives and in seasonal employment.

It is clear from the aforesaid that it is safe to rely on the cooperatives in the building of socialism, and not only temporarily, in the reorganization of small-scale production into large-scale units, but also on the long range, in the whole stage of building the advanced society. It is thus most reasonable to develop the cooperatives as integral part of the socialist system and in accordance with their social and economic importance. Two extremities must be avoided in this work: the illusion of the omnipotence of cooperatives and, on the other hand, the underestimation, suppression and nationalization of cooperatives. The existence and functioning of cooperatives is not a negation of the state enterprises and the contrary is not true either.

Just as a national economy functioning entirely on a cooperative basis is unfeasible in capitalism, it is also, or perhaps even more, utopistical in socialism. The thunderous development of the forces of production, the powerful concentration of production, the size of the material and intellectual assets and their concentration required for up-to-date development, while inducing the organization and development of the state enterprises by necessity, preclude the cooperatives from significant areas of business. It would be unrealistic also in socialism if mining, key industries, major projects, foreign trading in big volumes, finances embracing the entire economy and several other fields were organized and operated under a cooperative system.

Therefore, the spreading of the cooperatives is determined also in socialism by economic rationality and financial interest. Cooperatives are needed in every field of the socialist national economy where their activities promote the welfare of their members and the other workers and, at the same time, the consolidation of socialist conditions.

The production of and trade in foodstuffs and consumer goods, activities serving domestic supply and exports required by the national economy as well as services, the building and maintenance of homes etc. for the general public, are especially ample spheres for cooperative activities.

The Hungarian cooperative policy is in perfect harmony with the development of economic control. On the other hand it is opposed to opinions considering the state enterprise to be at the same time an authority or, still more exactly, claiming that under socialist conditions the state enterprise discharges the economic organizing function of the state. In the framework of direct control this approach was well compatible with the wrong practice of letting the administrative authorities do business instead of the enterprises, or of letting the state enterprises discharge administrative functions and maintain relations of domination and subordination with the cooperatives.

The Hungarian cooperative policy rests on the principial foundation that in established socialism social progress entails the consolidation and strengthening of both state and cooperative ownership relations, their growing common features, and close cooperation between state and cooperative enterprises—and not a profound changing of the conditions of socialist ownership. Therefore the impatience asking for the nationalization of cooperatives is as mistaken as its opposite.

Further two important principles follow from the above. The first one is the guarantee of enterprise autonomy which is equally valid for state enterprises and cooperatives. Government authorities cannot do business instead of the enterprises and cooperatives. Enterprise autonomy is a primary condition of successful business. The interests of society are asserted by the state through the methods of socialist planned economy, realistically harmonizing the instruments of direct and indirect control, economic influence, statutes, ie., through economic control, state supervision and checking.

The second important principle is the acknowledgement and observance of equal rights in relations between state enterprises and cooperatives. State enterprises are not entitled to statutory functions over cooperatives but in very exceptional cases (disasters, epidemics, etc.). The relations between and cooperation of state enterprises and cooperatives are correctly based on the voluntary principle, mutual advantages and mutual risks.

Enterprise behaviour and adaptivity

The possible most flexible adaptivity of enterprises (cooperatives) to changing circumstances has become a key problem of the times. In this respect we must combat two extremities: firstly, the attitude of expecting everything from central measures, secondly, the opposite, ie., the failure to assess the enterprises' load-bearing capacity correctly. At times either the first or the second prevail which is obviously also due to the shifts in emphasis in the economic practice.

The load-bearing of enterprises (cooperatives) has apparently increased lately. This is understandable as there is no other way of gradually eliminating the disequilibria of the economy. In the present economic situation which can be safely described as an international crisis, no appreciable improvement in conditions may be expected but rather a deterioration must be reckoned with. Therefore, managers of large-scale farms must be much more flexible and adaptive. Development and *expansion of capacities* are only reasonable in activities where the result will be much faster rising total output, higher quality and income than inputs, and the quickest possible returns, which necessitates a more intensive use of available own materials and other internal resources. The other basic requirement is *economical operation* whereby workforce and assets are made the best use of. A more efficient use of the given assets, proper training, better financial provision, moral appreciation and regrouping of the workforce, as well as the integration of small-scale production and the utilization of associations offer considerable opportunities to increase the results, as it is palpably proven by examples of successful farms. Workforce is put first in this order because its knowhow and diligence determine the utilization of land and equipment and the economic results of biological, technical and technological modernization. In the 1980s, the value of fixed assets a worker was in charge of, that is, a worker was making good or bad use of, amounted to 450 thousand forints in state farms and to 270 thousand forints in cooperative farms. However, taking care of people is not merely a wage-and-income affair but it also includes housing, social care, urbanization, professional training and culture, and improvement of the way of life.

The structures of land area to be sown as well as technologies require yearly decisions—although on the basis of long-term considerations—pondering alterations expected to produce the best possible result. Experiences of successful large-scale farms indicate that the 'species policy' of the enterprise is the decisive point in forming a plant structure suited to the conditions of the cultivated area. The asset (capital) and input (and therewith profit) implications are perfectly different in the case of wheat for bread vs. early wheat for feeding, autumn barley etc. although all of them are cereals.

Technology needs special study. The majority of the Hungarian large-scale farms still apply in plant production, feeding and animal husbandry technologies of the time before the oil price explosion, although conditions have profoundly changed in recent years. For example the costs of plough land production have been substantially increased by the great rise in complementary inputs and the costs of parts and fuels. It is therefore imperative to update the technologies without delay and this should be carried out basically through the following: by designing a new energy-saving system of soil cultivation; by using a plant sequence (crop system) whereby fixed assets are more efficiently utilized, and also higher productivity species, and by devising the technologies belonging to the above.

Let us quote in this context István Vas, director of the Dalmand State Farm, who gave a most instructive summary of their own experiences through the example of maize production: "With the new technology of maize production the corn-stalk is not removed from the soil but it is crushed after harvesting, the grain is then worked into the upper

layer of the soil with a disc tiller, to be then ploughed in. In the soil to which a large amount of organic material has been added and whose structure is destroyed by the heavy tools, ploughing will be not less than medium-deep, and subsequently repeated runs of disc, ring roller, 'Crosskill' roller and combiner prepare an acceptable bed for seeds, then we sow and cover the beds. All that is done with weighty heavy duty tractors of 160 to 200 kW and with tools and equipment worth several hundred thousand forints or even a million forints.

Owing to changes in technology, the costs related to stalk harvesting and removing are shifted from the maize production costs to be added to the technologic costs of cereals. With this and the very expensive further technological processes the costs of production increase and grain production is deteriorated by the sowing bed of reduced biological value, by the delayed date of sowing and by leftover stalks. So we create the conditions of smaller production with a more expensive technology. This is one of the reasons why the average yield of cereals of 5–6 t/ha of recent years has been by 3.5–4 tonnes below the average in yield of maize.

"So it stands to reason that the technological processes of plant production be formed and developed along with a uniform technology of utilizing the soil." [1]

The organizing of high-quality and efficient soil utilization and production on arable land is the starting point for rational farming in every large-scale farm. However, the organizing of animal production with the same objective and standards must also be adjusted to it.

At present the efficiency of animal production is lagging far behind the efficiency of plant production in most of the Hungarian large-scale farms. For this reason the profit earned by production on arable land is often consumed by misorganized animal husbandry. (The opposite seldom happens.) Solution of this problem is not a bit less important than what has been said above about the utilization of soil and plant production. The branches of animal production require namely half or more of the arable land in most farms.

It has been shown in the above that the 1980s ask for the evolution of a brand new enterprise behaviour. Unlike the old practice of administrative management which prevailed in the entire economy including the agriculture and which expected everything to come from the top, no viable economic management is possible now unless it is backed up by a realistic assessment of the actual situation, adapting itself to conditions and changing circumstances, and unless it has the spirit of initiative and enterprising. In other words: the old style, attitude and methods of enterprise management adjusted to implement central instructions must be replaced as soon as possible by a mechanism of powerful internal interest. The internal organization setup and the organization of production which are excessively and onesidedly based on the instructions of the central management of the enterprise, and on the implementation and control of those instructions, should be developed into enterprise units of independent financial concern functioning with an as broad autonomous sphere of authority as possible. This endeavour has already manifested itself in the organizing of small teams, divisions and sections with

independent economic accounting and interests and having autonomous spheres of authority in given fields, and in the spreading of contractual and farming, lump-sum according, as well as family farming and animal production.

The independent accounting and interest system developed at the Hajdúszoboszló State Farm is presented here to illustrate the functioning of business units with independent economic accounting and interests. In this farm having a land area of over 10.000 hectares and producing half a billion forints of output value (where 1178 people worked in 1980) five bigger and four smaller divisions of production and services with independent accounting were formed. The farm gives for use all the equipment which the divisions can utilize during the year for their own activities. The directors of the divisions are granted full employer's rights and they represent the division independently towards other business organizations and the competent party and social organizations.

Their work is assisted by the enterprise's departments for planning and economics. For products with procurement prices or other market prices, these prices are entered in their accounts. For products or services for exclusively internal use accounting prices are applied on the basis of prices of substituting products or services or of those of similar market value. The actual costs are charged for the services of maintenance workshops [2].

The system of internal interest and management of the Baksa Silver Ear Cooperative is known in the cooperative sector of the whole country. This cooperative cultivates 3000 hectares and it formed 15 independent units where 400 people are working. The leaders and workers of the small teams undertake by contract to carry out tasks earmarked for them in the plan of the cooperative and coordinated with them. Together with the tasks, the plan states, on its basis of data of the year before, the wages payable according to the norms as well as the profit the given self-accounting unit is expected to achieve. For materials and services used by the small teams charges are centrally fixed to assure equal incentive for workers to cut costs and to increase yields. The members of the small teams are financially interested in attaining additional results.

The agricultural large-scale farms, both the state farms and the cooperative farms, are enterprises with a vertical structure pursuing diversified activities. Therefore, the managers of agricultural large-scale farms must not reduce their activities to one single link in the chain of farming but must control the entire chain from exploiting the fertility of soil up to the marketing of the end product. This path is shorter in the case of plant production and longer in the case of animal products (milk, meat etc.) and of industrially processed products. It is essential that the updating of technology and the organization of production should embrace the complete path of any given end product and that management should clearly see the results or losses of each link in the vertical chain whereby the output (production and profit) of the entire chain is determined quantitatively and qualitatively as well. This is what business economics call systemic approach, or vertical or integrated production control, production organization technological development, ie., by comprehensive name, systemic approach. This has begun to unfold itself in the Hungarian agricultural large-scale farms as well. Its consistent implementation, however, requires a more advanced mechanism of analysis and

organization together with the necessary financial and personal conditions. For example, the book-keeping system in force is not suitable for making such analyses but with certain completions, because at present it is suited rather for satisfying treasury (taxation) requirements and not those of enterprise analysis. It is acutely in need of alteration because that would greatly assist the flexible adjustment of large-scale farms to changing circumstances.

Flexible adjustment is naturally a complex process influenced by many factors and the understanding and good intentions of managers are not enough. Its assertion also requires investment, technological development, knowhow and enterprise funds to support them.

In *conclusion* it ought to be noted that the assertion of the systemic approach is a general postulate of the development of the entire economic control and management. Up to now it has been a very important feature of the Hungarian agrarian policy that it has not detached the agriculture from its national economic interrelationships, its relations established with other sectors, but has tried to integrate it with the latter. This was already shown in the early 1970s when the development of the so-called "agroindustrial complex" or "the food economy"* was emphasized. Nowadays it is even more pressing to solve this problem. Its substance is an even better concerted development of the agriculture, the food industry and the associated branches (chemical industry, engineering industry) as well as trade, transportation and storage.

During the past decade the Hungarian economic policy has became more and more permeated by the realization that food, a commodity for which the conditions of production are favourable in this country, acquires a strategic importance like crude oil and other primary energies. Although industry plays a decisive role in modern society and economy, food production and supply are not issues of secondary importance either. It is a historical fact that in the most advanced industrial countries also the agriculture and food production represent high standards. The lesson follows from the above that the advanced socialist society can find its support in advanced agriculture.

References

1. Vas, I.: A termelési folyamatok vállalaton belüli szervezése a Dalmandi Állami Gazdaságban (Internal organization of production processes in the Dalmand State Farm). *Állami gazdaságok tapasztalatai,* 1982. 2. pp. 29–31. MÉM Információs Központja, AGROINFORM, 1982.
2. Czok, Gy.: Belső önelszámolás és érdekeltségi rendszer a Hajdúszoboszlói Állami Gazdaságban (Internal system of independent economic accounting and interests in the Hajdúszoboszló State Farm). *Állami gazdaságok tapasztalatai,* 1981. 1. MÉM Információs Központja, AGROINFORM, 1982.

*Meaning agriculture plus the food industry. (Ed. note.)

УСТОЙЧИВЫЕ ЭЛЕМЕНТЫ И МЕНЯЮЩИЕСЯ УСЛОВИЯ В АГРАРНОМ РАЗВИТИИ ВЕНГРИИ

Э. ЧИЗМАДИЯ

Одним из основных источников успехов социального и экономического развития последних десятилетий в Венгрии была успешная аграрная политика, оказавшая благоприятное воздействие на общественную и экономическую жизнь страны. В статье рассматриваются следующие устойчивые элементы аграрного развития: изменение характера сельскохозяйственного труда и условий жизни крестьянства, материально-технический прогресс, основные элементы системы управления экономикой, целесообразное сочетание крупного и мелкого производства, кооперативная политика и гибкое приспособление сельскохозяйственных предприятий (кооперативов). Всё это представлено автором в изменяющихся условиях, в динамическом развитии. Тем самым показывается направление развития и его основные тенденции. Он подчеркивает, что в новых условиях наряду с управлением экономикой должно неизбежно произойти также и дальнейшее развитие поведения предприятий.

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DOCUMENT

THE 17TH APRIL, 1984 DECLARATION BY THE CENTRAL COMMITTEE OF THE HUNGARIAN SOCIALIST WORKERS' PARTY ON TASKS RELATED TO THE FURTHER DEVELOPMENT OF THE SYSTEM OF ECONOMIC CONTROL AND MANAGEMENT (Abridged*)

In conformity with the resolution of the 12th Congress, the Central Committee reviewed the operation of the system of economic control and management. Setting out from the declared societal and economic objectives, it defined the tasks related to its further development. . .

II.

In economic development, and in perfecting the mechanism of operation attained socio-economic standards as well as the requirements of intensive growth and of the international division of labour have to be taken into account.

In the immediate future the most important efforts of economic policy will be aimed at improving the quality of management and, on this basis, at consolidating economic equilibrium, protecting living standards and laying the foundations for their further rise. To this end the income-producing potential of the economy has to be boosted, more efficient management of public property is necessary and the working population must realize that they are the owners and hence that they are also responsible for management.

The main lines of foreign trade and production development policy should be shaped in harmony with the interests of our socialist society. The openness of the Hungarian economy demands that direct connections between economic units and world economic forces become stronger. The expansion and deepening of economic cooperation with the Soviet Union, with the other members of the Council for Mutual Economic Assistence, and with other socialist countries is of particular importance for the development of the Hungarian economy. Bearing in mind mutual interests, increased efforts must be made towards greater specialization in production, closer collaboration, the expansion of commodity trade and the exploitation of the potentialities of cooperation.

*The first part of the declaration surveys the main steps of reforming the economic control and management system of the Hungarian national economy prior to this declaration (1956–1983). (Ed. note.)

In keeping with the needs of the developing countries commodity exports have to be increasingly linked to direct participation in development projects and in production. The expansion of exports needs the charting of possible new import requirements.

In order to increase exports to the developed Western countries, making them more profitable, standards of marketing must be raised and existing and new forms of relations must be more fully exploited. Opportunities for attracting operative (productive) capital in an advantageous manner have also to be looked for.

Economic activity in the years to come will continue to concentrate on quality factors, increasing the income-producing ability of the economy and improving its international competitiveness. Technological progress has to be accelerated, unit material and energy consumption decreased and the utilization of labour has to be rationalized. The economical exploitation of resources, an improvement of the internal demand and supply relations and the expansion of inter-enterprise cooperation relations have to be stressed. Distinguished attention must be paid in the future as well to industries with an international reputation, of great importance for the country, such as e.g. bus building, telecommunications and vacuum technology, aluminium and pharmaceutical production, the food processing industry, as well as to the intensive production of cereals and the carrying out of the meat programme.

In the interest of modernizing the production structure the following must be accelerated:

- the wide application of electronics, particularly of microelectronics and computer technology, the deepening of the related internal economic and international cooperation;
- exploitation of the agro-ecological (bio-) potential; the propagation of related industrial production and services, R&D and technology;
- development of systems and technologies as well as of related services promoting the intellectual content of exports that increase their value.

It is an important condition of greater competitiveness that efficiency and technological development be given a determinant role in the work of every enterprise and cooperative. This requires the suppression and elimination of uneconomical activities.

In order to attain the goals of economic policy the degree of efficiency of the central control activity has to be raised, the role and scope of the regulated internal market has to be expanded, and the entrepreneurial behaviour of enterprises has to be developed. The ongoing and coordinated improvement of economic control activity should comprise every element of the control system; planning, economic regulation, and the institutional and organizational system. It should further a fuller accomplishment of the human factor.

III.

1. In harmony with the economic organizing function of the socialist state, the main task of the central government control will continue to be the formulation of the

national economic plan and the state budget, organizing and supervising their implementation, coordinating economic processes, elaborating and operating the system of instruments of economic control (producer and consumer prices, wages and earnings, taxes, credit, interest rates and rates of exchange). The efficiency of government and of the central control agencies has to be improved, first of all in the development (investment) decisions determining the structure of the economy, in shaping the conditions promoting technical progress, and in carrying out interstate duties related to cooperation with the CMEA countries.

Government control must be rendered more continuous and more effective, there must be a greater sense of responsibility all round, and the control of economic processes must be improved. National economic planning has to be improved, the organizational system of economic institutions and enterprises have to be developed and market regulating and market organizing activity improved.

2. The national economic plan is the basic tool for asserting the interests of society, of controlling the socialist economy. The main task of planning remains the formulation of the strategic goals of economic development, the coordination of national economic processes and the definition of the system of instruments of implementation.

National economic planning and the plans themselves have to comply better with the requirements of the intensive stage of development of the economy and of changing external economic conditions. The linking of plans drawn up with different time horizons, their realism, and thorough grounding have to be secured even under changing conditions. The openness of the plan has to be preserved and there must be greater democracy in planning work.

National economic plans should better weigh and take into account social processes closely linked to the economy than was the practice hitherto, including the educational system, training in skills, access to and participation in culture and social policy. It is indispensable to identify clearly the main goals of research and development, and to give effect to the determinant trends of technical progress. The role of regional planning in regional and settlement development programmes and in the grounding of economic activity by local government councils has to be strengthened. Planning should devote greater attention to priority tasks, above all to laying the foundations for a selective development policy, to improving economic equilibrium, and to the shaping of prices and incomes according to the plan. The participation of functional and sectoral ministries and national authorities in economy-wide planning has to be better coordinated and the contribution of voluntary social, professional and scientific bodies has to be expanded.

3. Equilibrium between domestic supply and demand has to be maintained by the deliberate organizing activity of the state and with the aid of the regulated market mechanism. Market surveillance is a uniform and comprehensive governmental duty. It should effectively contribute to a development of export-import trade in harmony with economic policy goals, controlling the observation of the legal regulations governing management, initiating action against enterprise behaviour that derives from a monopoly situation, or other circumstances, should it infringe upon national economic interests.

The organizational system of market surveillance and the division of competencies has to be further developed in a manner that strengthens the role and responsibility of the competent government agencies in preventing and averting disturbances in the trading processes. The sectoral ministries must take part in this work.

Governmental activity has to promote efficiency, and the evolution of economic competition among enterprises by developing the institutional system of economic control as well as the organizational system of enterprises.

Organizational modernization should continue systematically. Enterprise size should adjust to the requirements of economic and efficient production. Cooperation among state enterprises as well as that between state enterprises and cooperatives must be improved. The competency of enterprises and cooperatives licensed to trade abroad on their own account has to be expanded. Conditions have to be consolidated which ensure that enterprises and cooperatives be interested in flexibly changing their scope of activity in conformity with the demands of foreign markets, producers and consumers.

5. Progress should be made in the direction of developing a banking system in which the function of the bank of issue (the central bank), state investment banks and commercial banks are kept apart. While preserving the state monopoly of money issue and foreign exchange management as well as the central raising of foreign loans, the banking system should develop in such a way that the functions of the central bank are carried out, while the opportunities for entrepreneurship expand, by increasing the role of credit, and by strengthening the business character of crediting and financing. In the granting of loans increasing efficiency and profitability as well as quick returns should be aimed at. A rational regrouping of material resources has to be promoted in harmony with economic interests.

6. Relations between the economic control agencies and state enterprises have to be developed in such a way as to improve the degree of efficiency of central control and to expand the autonomy and responsibility of enterprises.

The present form of enterprise management–a manager appointed by the founder, board of directors, supervisory board–should be maintained for communal and public utility enterprises, as well as for productive and non-productive enterprises thus classified for state interests by the Council of Ministers.

The internal organization and management system of holding companies (trusts) has to be further developed. By increasing the autonomy of member firms–in justified cases linking them directly to the state budget–holding companies (trusts) with a limited scope of authority may be introduced. When holding companies are broken up, associations (amalgamations, joint enterprises) may be formed of the member firms for carrying out common tasks.

The division of labour between state agencies and enterprise management in respect of the ownership rights over socialist property and of employer rights has to be modified. Two novel forms of management have to be introduced in state enterprises–without changing the nature of ownership–management by enterprise council and by elected manager. The foundation of state enterprises and the definition of the scope of their

activity, the determination of the form of management as well as the authority related to problems of senior personnel and the liquidation of enterprises remain within the scope of authority of the state.

Medium-size and some large state enterprises should operate under the control of an enterprise council. The enterprise council is the strategic decision making body of the enterprise. The enterprise council as a delegated authority exercises some rights of disposal over social property and the role of the employer *vis à vis* the manager. Continuous management of the enterprise, and the taking of decisions necessary for the implementation of the enterprise plan is the duty and right of the enterprise manager.

The duties of the enterprise council include employer rights *vis a vis* the manager (election of the manager, evaluation of this work, assessment of executives); decision on the winding up of the enterprise or its merger with an other firm; essential changes in the scope of activity of the enterprise; approval of the annual plan and of the financial reports (of the balance-sheet); creation of units with autonomous economic accounting; foundation of affiliates, and the creation of economic associations. It may appoint and relieve the manager in agreement with the founder (minister, head of national agency, competent local government council).

The members of the enterprise council are the delegates of workers and the representatives of management. The secretaries of the enterprise's HSWP organization, trade union, and Communist Youth League take part in its work. The delegates of the workers are elected by the collective for a defined term. The persons delegated by management into the council are appointed by the manager according to the prescriptions of the relevant legislation. The number of council members should be established in conformity with the character of the enterprise, bearing in mind that it should be an operative body. The council elects a chairman from among its members. In enterprises that will operate under the control of an enterprise council the tasks earlier performed by a board of directors with right of decision will be performed in the future by the enterprise council.

In enterprises directed by an elected management—these will usually be smaller enterprises controlled by ministries or councils—the assembly of workers or a meeting of their delegates wiil exercise some of the rights related to ownership, and those of the employer, *vis à vis* the manager; these have to be specified in the enterprise statutes. The manager and the member of the management will be elected and recalled by the workers. The principle of personal responsibility will invariably hold. The property of enterprises operating in this form is indivisible. In case they are wound up the founder disposes over their assets—after having met all obligations.

The founders exercise legal rights of surveillance over enterprises operating under an enterprise council or with an elected management.

The new forms of management have to be introduced—after careful preparation—as soon as possible.

7. The cooperative movement is making successful progress in Hungary. Improvement of the internal mechanism is an important instrument in developing cooperative

management. Democratic ways in cooperative elections and the work of their representative bodies must be furthered. It is important to strengthen the ownership-awareness of the membership and their commitment. The opportunities inherent in cooperation among cooperatives and in that between cooperatives and state enterprises ought to be better exploited. Official and administrative duties the exercise of which is the duty of state agencies, which disturb the safeguarding of interests, have to be excluded from the activity of the bodies safeguarding interests.

IV.

1. The economic control system has to be modernized in a way that a uniform interest relying on mutual advantages should stretch all the way from research to marketing. Economic regulation, the market and economic competition should create such internal economic circumstances which stimulate and urge all participants in economic activities for increasing achievements and improving performance, as well as flexible adjustment. At the same time they have to signal and prevent non-competitive, uneconomical activities and allow for dynamic development in profitable areas. The system of preferences has to promote the assertion of the national economic interest.

In developing the system of economic control the objective properties of the activities also have to be considered in order to strengthen favourable processes, create the conditions for the evolution of competition and increase the efficiency of management in both the state and the cooperative sectors as well as in the infrastructure and services.

Profitable management is a general and basic requirement. Profit should be at the centre of interest in an ever growing sphere of economic organizations—including the productive enterprises controlled by local councils.

In enterprises and organizations providing social policy and educational services important for societal reasons, in some sections of the infrastructure and in the health service financial regulations have to be introduced which link the high-standard performance of basic tasks with the need to make savings.

2. In order to improve results in foreign trade, export regulations have to be worded in a manner that makes their meaning clearer, and the restrictions of import management have to be reduced. A more extensive use of tax-refunds and development subsidies should gradually be given a greater role in stimulating exports. For trade accounted in roubles regulations have to be worked out which increase the interest of enterprises in meeting the commitments undertaken in interstate contracts and in more thoroughgoing specialization.

3. The development of the price system and the price mechanism should ensure that prices should only express socially justified inputs and thus increasingly stimulate and force producers and users to efficient management.

Modernizing the producer price structure should result in a price system and mechanism that stimulates supply, expands the range of choice, and allows prices to express the quality of the product, thus preventing the costs of uneconomical or shoddy production to be built into the prices.

The price-shaping role of supply and demand should assert itself in a wider scope in areas where the conditions of competition have already become established or can be brought about. The central control of prices and the central regulation of price formation have to be maintained in the future as well. The official setting of producer prices is justified even in the long run in the energy producing and servicing sectors, to some degree in agricultural procurement, in the basic areas of productive infrastructure and in the basic infrastructural servicing of public needs.

Basically the inputs accepted by the international market have to be expressed in the domestic producer prices of primary energy, basic materials, and the decisive part of manufactures as well as some services. The domestic producer prices should move between the export price and the import price plus customs duty. Exceptions may be made in justified cases.

The producer prices should shape on the basis of domestic inputs, under the impact of the planned influence of market relations, in such areas where no international standard can be set for the measurement and comparison of performance, but competition may be created between domestic producers. The prescriptions of price formation and calculation have to be made simpler, clearer and more controllable. The gradual abolition of price subsidies for producers has to be continued.

The system of consumer prices has to be developed in a manner which allows prices to conform to both the economic and the social policy requirements. It is a condition for a proper harmony between production and needs, of securing an adequate supply of commodities, that inputs expressed in producer prices should assert themselves in consumer prices, that consumer prices should not durably part with producer prices. Within the scope of consumer prices the mutual impact of demand and supply as well as those of prices and production should strengthen. The role of the turnover (sales) tax in price formation has to be increased.

Consumer prices of products and services should be subsidized in the long run only in cases justified by social policy. The prices of products and services of fundamental importance for public consumption have to be centrally determined in the future as well. Official price setting should continue for staple foodstuffs, fuel and petrol, and for the prices and charges of some other defined products and services (e.g. pharmaceutical products, health and cultural services, basic educational articles). The planned shaping and thorough control of consumer prices has to be ensured.

4. Incentives for economic agents imply that enterprise incomes and profits shape in harmony with actual performances. Income regulations should permit enterprises to decide for themselves on the use of income available to them. Central regulations relating to the allocation of enterprise incomes should be abolished.

In the interest of a more rational management of resources and of stimulating technical progress enterprise burdens related to the use of live labour should be increased and the taxes and levies related to assets should be relatively reduced. The transformation of the taxation system of economic units should result in a growing interest in profits. The rate of taxation should be established in a manner that allows for both the autonomous management of enterprises and the planned regulation of purchasing power.

The further development of the income regulation system has to ensure that economic units have a bigger share in better performance, and a greater interest in profits.

In those areas of production where economic competition among enterprises cannot get off the ground as well as in part of the non-productive sphere (e.g. communal and public utility enterprises, budgetary institutions and some services) price and income regulations have to adjust to the particular features of the field. In agriculture, including complementary and auxiliary farming, general principles of income regulation must be asserted together with certain special features.

5. It is an important condition for attaining our economic objectives that social and moral rewards as well as material (financial) interestedness should equally stimulate higher performance. Earnings should be more expressive of real performances. To ensure this the system of regulating earnings and internal enterprise interests has to be improved.

In the regulation of earnings methods adjusted to enterprise performances and permitting more flexible wages and labour management on the part of enterprises have to be introduced. Better performance should entail proportionally higher earnings. A saving in costs that does not diminish the quality of the product or service should be considered as additional performance and it should be made possible for a greater part of such savings to be used to increase wages than is the case today.

The present enterprise average wage control must be abolished in those fields where methods stimulating higher performance can be applied and where economic competition and sensitivity to prices and costs can restrict the outflow of wages not backed by performance. Earnings should depend on the size of profits, on the enterprise decision on the use of profits, as well as on the taxes on wages. In other areas of the economy control of the growth of average wages should be maintained. The methods should be indirect or through taxes.

Further attention to the regulation of wages and earnings should mean a more consistent application of the principle of socialist distribution, and the suppression of the approach and practice of levelling.

The internal system of enterprise interests should allow greater financial rewards for workers who show greater enterprise, take the initiative and offer higher performance. Greater wage differentials are justified than those existing today between workers with above-average and below-average performance.

6. Interests should be more differentiated than earlier, making incomes proportional to enterprise performance. A better expression of diverse interests has to be made possible and the reconciliation of interests has to be improved. Meetings between the heads of the government and the representatives of the trades unions have to be

continued. Members of the government should hold regular consultations with the leaders of national representative bodies and social organizations discussing important problems affecting the living and working conditions of the membership of the section of society represented by the latter.

Reconciliation of interests within the enterprises should take place within the framework of collective agreements in the future as well.

Beside reconciling national economic and inter-enterprise interests the opportunities and expedient methods of reconciliation of professional and territorial interests have to be examined.

7. Income is an important instrument of incomes policy. A uniform system has to be devised for the progressive taxation of personal incomes. Ways have to be found to ensure that taxation or its introduction should not reduce the average level of real wages and salaries and should not restrict performance. The introduction of this kind of taxation requires proper preparation and separate decision.

The basic features of the social benefit system established in past decades have to be maintained. Modernization is needed that promotes a more efficient management of the considerable resources involved in social benefits. Efforts have to be made to ensure that the weight of income from work should grow within total income. Further social policy measures should strengthen the security of existence, and moderate the inequalities that are independent of work and performance. Harmony between the performance of the economy and available social benefits has to be improved. In meeting social tasks rational proportions have to be established between the state, the social organs, the job and the family.

8. A regrouping of labour, means of production and money among economic organizations promoting a faster development of efficient enterprises has to be promoted. Conditions must be defined in a manner that not a single rationally organized activity important for the economy or the consumer goods available to the general public be put in jeopardy. In shaping the conditions of the flow of assets (capital) the role of central economic management remains important.

The legal regulations and those of interestedness have to be modified in a manner to give greater scope for the assertion of the rights and duties of both employers and the employees. In the re-direction and organized retraining of the transitorily or lastingly unemployable labour the state control agencies and the local councils have to be allotted appropriate roles.

9. In conformity with the political resolutions for the modernization of regional development and council management the economic autonomy of the local councils has to be substantially increased. The development of regions and settlements should become the common cause of all, participation of the population in the identification, carrying out and control of local tasks should increase.

The financial backing of local autonomy must be essentially improved. In the future the local councils have to dispose of the greater part of the resources needed for operation (maintenance) and development. A great part of central prescriptions related to

development has to be abolished and the responsibility of county and local councils for their decisions has to be enhanced.

V.

The Central Committee has surveyed the social interrelations of the development of the system of economic control and management. It emphasized that the attainment of the social and economic goals demands a considerable improvement of the performance of the economy and a consistent elimination of the factors hindering it. It stated that the improvement of economic performances is hindered by the following: the relative backwardness of technological standards, the unsatisfactory assertion of material (financial) incentives, the wide scope of low-efficiency activities and of those entailing losses, the weakness of control, the deficiencies of plant and work organization, the looseness of work discipline, and, at places, the inadequate use made of the labour of those employed. It is also an objective of the further development of the system of economic control and management that a socialist solution be found for all these problems which promotes the gradual elimination of unfavourable processes and ensures the solution of the basic social and political tasks.

A differentiation of incomes according to performance corresponds to our socialist principles and economic interests. It provides better opportunities for the development of efficiently managed enterprises and their development resources may expand faster than average. One must also reckon with the growth of the financial and management difficulties of less efficient enterprises and those incurring losses. This will force them to change their activities (production pattern, organizational order) and to essentially improve their management.

The differentiation of enterprise and personal incomes will very likely strengthen labour mobility. It is important that economic control agencies should help, if necessary, with organizational measures and retraining the flow of labour towards more efficient enterprises which are capable of development.

Economic control should apply such instruments which keep price rises within adequate limits and secure the planned formation of incomes and prices.

The Central Committee once again emphasizes that the basic task of the HSWP in economic matters is to define economic policy, to ensure its assertion and to control its implementation. The main task of party organizations is to assert locally the economic policy principles, to help implementation using political instruments, to secure the support of and mobilize the masses. They should shape public thinking through proper ideological and political activity, devoting increased care to personnel work, and clearly support good initiatives. They should promote the coordination of long-term objectives with the opportunities for development. They should initiate an ongoing modernization of the enterprise management and incentive system that increases performance and strengthens responsibility. They should ensure that state, economic and social bodies

should work in harness carrying out their tasks in the implementation of economic policy objectives.

Political decisions and control must not lead to interfering with operative economic management, to deciding instead of the competent state bodies and economic units.

The Central Committee calls upon the trades unions, the Communist Youth League and the social organizations to help in the further development of the system of economic control and management.

Some steps in the improvement of the system of economic control and management are linked to a time-table, others require ongoing implementation. Some of the measures have to be introduced already this year, and in 1985 coordinated measures, extending to several elements, have to be taken.

The Central Committee requests the Council of Ministers to work out the related government tasks submitting to the National Assembly proposals for the necessary amendments to the law, implementing the organizational changes, and those in spheres of competence necessary to ensure more efficient work on the part of the state control agencies.

* * *

The Central Committe states that the further development of the system of economic control and management is a programme serving basic social, economic and political objectives which require the active support of the people. . .

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COMMENTS AND CRITICISM

TENDENCIES IN A SHORTAGE ECONOMY

G. KERSTEN

Introduction

A shortage economy is, according to *Kornai* [10] who introduced the term, qualification of a certain class of economic systems. Many economists have been inspired to deal with such problems as institutional solutions, control mechanisms, regularities and tendencies occurring in different types of the shortage economy. Their writings (e.g. [4], [6], [7], [16] concentrate mainly on description and analysis of particular types of systems within one class, or on some of their elements or subsystems. It has become a general practice to distinguish and to contrast a highly centralized, commanded economic system with a modernized one, e.g. the Hungarian (also the Polish system based on Large Economic Organizations–WOG, introduced in early 70s).

A great many economists share critical opinion about the centralized system, called the traditional socialist economy by Kornai. It is, in fact, the shortage economy in its pure form. Already in mid-50s and even later it has attracted much criticism.

The evaluation of mixed systems (the modernized one and others, partially decentralized) is less unequivocal. Some economists (e.g. ([1] p. 40) state, that only midway solutions–partly decentralized systems–are good. On the other hand e.g. *Iwanowska* ([8] p.31) and *Józefiak* [9] try to prove that mixed systems are not consistent, they possess advantages as well as disadvantages of pure systems (the totally centralized and the fully decentralized one). They are not stable and they show a tendency to become transformed into the traditional system.

Economists differ in opinion about various types of the shortage economy. This suggests that the efficiency of these systems also differs. It could mean that there are substantial, qualitative differences among particular types. But in his "Economics of shortage" Kornai proves the existence of only quantitative differences among systems belonging to the class of shortage economy. The functioning of these systems causes the same tendencies to appear–only their intensity differs. This results from the fact that each type of the shortage economy applies the same institutional solutions and the same control mechanisms*. Kornai proved that all the economic systems current in European socialist countries so far are different types of the shortage economy.

*The shortage economy [10], is, generally speaking, a system in which activities of firms and other organizations are strictly controlled, forced quantitative growth is a stable phenomenon, budget constraints of firms and organizations are soft, and budget constraints of consumers – hard.

Solutions and mechanisms characteristic of the shortage economy entail definite effects. Evaluation of different types of systems can be substituted by a discussion on the following topics. Is it better when the effects of the economy manifest themselves in the short or in the long-term? Evaluation of the whole class, namely of the shortage economy, is an evaluation of effects and not of the way in which they are revealed.

At the end of the first volume of his book [10] Kornai makes general statements about two pure economic systems: the traditional socialist system and the classical capitalist system (decentralized and free from state intervention). These statements, if we compare them with the preceding part of the book and with real life, surprise us. They are worth verifying though, as they can play an important role in an evaluation of socialist economic systems and in the preparation of necessary changes.

The article consists of 6 parts. The first part gives an outline of the class of economic systems which will be discussed later. The second one presents assumptions and statements in Kornai's book. Part 3 is a discussion devoted to the preparation of production plans in firms operating within the traditional system and within the classical one. In part 4 I concentrate on tendencies of the shortage economy. Part 5 is a criticism of Kornai's statements. Finally, I formulate some hypotheses of a more general character—social reaction on the functioning of the shortage economy.

Utilization of social capacity

Systems capacity and social capacity

It is convenient, for the sake of comparison, to use concepts which embrace many features of systems and enable their unequivocal evaluation. We can assume, and it agrees with economic theory, that the more special capacity a system utilizes, the more efficient it is*. It is difficult, however, to define the level of utilization of social capacity very precisely.

Kornai tried to judge different economic systems. In order to do that he used the concepts of social capacity and of normal conditions in which firms and a system work. The term normal conditions—in other words, those which are considered normal by society—is not a precise notion. They are susceptible to subjective feelings, and can be changed irrespective of the production capacity of firms.

Despite all these shortcomings, utilization of the concept of normal conditions for the sake of comparison between the efficiencies of different systems seems to be justified. It allows to evaluate these systems form the point of view of society, so it takes into account the opinion of people whom the economic system serves. As the concept is not precise, we can use it for comparing systems which are basically different, systems that belong to different classes.

*Utilization of social capacity is connected with outlays, whereas the system's efficiency also covers effects. The category of social capacity is so wide that it embraces outlays and effects.

If we want to analyse the efficiency of a system we must make a distinction between a system's capacity and social capacity. A system's capacity is connected with the concrete form of a system; it is a result of mechanisms within the system, solutions, etc. Social capacity is an objective notion, it is a result of the level of socio-economic development achieved by the society. Along with a change of a system (i.e. reform), its capacity changes; but social capacity, understood as production potential of society ([14] p. 14) may remain unchanged.

We can compare different economic systems only when we take into account social capacity and not their actual capacity. A system can use its capacity to full 100 percent and social capacity to 30 percent only. Another system can use its capacity to 70 percent and social capacity to 60 percent. The latter is more efficient, because its utilization of social capacity is two times higher. Furthermore, there are possibilities for increasing its efficiency, because its system's capacity is not fully exploited. The system's capacity of the first system is fully exploited but accompanied by a very low level of utilization of social capacity. In such a case, the only reasonable thing we can do is to change the system. The one that has been in operation so far limits possibilities for further growth.

Two theorems

Kornai said ([10] pp. 291–292), that:

(i) *In the traditional socialist economic system the social capacity utilization is taut.*

(ii) *In the classical capitalist economic system the social capacity utilization is not taut.*

He also stated ([10] p. 271), that a system utilizes its capacity when firms cannot achieve higher production under normal conditions. The last statement helped him to formulate (i) and (ii) which can be treated as a synthetic evaluation of two different economic systems in their pure form.

If (i) and (ii) had only judged utilization of a system's capacity, not social capacity, there would be no need to discuss Kornai's statements any more. They would have been right, though they should have been formulated in the following way:

(iii) *In the traditional system the system's capacity utilization is taut.*

(iv) *In the classical system the system's capacity utilization is not taut.*

It seems to me worth finding out to what extent social capacity is utilized in both systems. I shall concentrate on this problem later in the paper.

Kornai formulated his judgements about two systems by means of (i) and (ii) not (iii) and (iv). His book "Economics of shortage" gives a far more complex and deeper description of mechanisms functioning within the shortage economy, than any other book published so far. It would be difficult to overestimate the importance of theorems (i) and (ii) included in a book of such significance. But we should not oversee the fact that they arouse surprise in Poland of the 80s.

Goscinski ([6] pp. 111–112) wrote about statement (i): "Advantages of this situation (namely advantages of the shortage economy–G.K.) can be found, according to Kornai, in the fact that the pressure of shortage leads to full utilization of capital and production capacity. It seems logical, though unacceptable. First of all it has never been proven in economic practice. On the contrary, due to permanent shortages. . . despite enormous efforts, we have always suffered from a low level of utilization of nominal social capacity. We should also say that in the Polish economy, as well as in economies of other socialist countries, these shortages have not contributed to a better utilization of invested capital; what is more, they have caused a steady deterioration of relations between growth resulting from better utilization of production capacity and growth resulting from new investment."

If we omit the remark about Kornai's logical but unacceptable way of reasoning, we must agree that the above description of effects of the shortage economy is very true. It contradicts (i) because Kornai drew conclusions from a logical but only partial proof. He did not take into account those aspects of the shortage economy which cause social capacity utilization to remain on a relatively low level. It is worth noting that several hypotheses and phenomena that shake (i) are formulated in [10].

Statements (i) and (ii) result from (as the author himself points out) statements and hypotheses included in Chapter 2 of "Economics of shortage". I shall treat material included in this chapter as a proof of (i) and (ii) and, therefore, I shall call them teorems.

Any criticism of a theorem can be made if its assumption and/or proof are undermined. Kornai describes reality and the description is logical. But there still remains one problem: are the proofs adequate to (i) and (ii). Underneath I present all the basic elements of these proofs and I pay special attention to those that make the theorems sound doubtful. My hypothesis is: *material included in* [10] *can be treated as a proof, but not as the proof of theorems formulated by Kornai.*

Centralized and decentralized economy

Before giving a description of the traditional socialist economy I make Kornai's classification more general. Division into the traditional socialist economy (even if it is reformed) and the classical capitalist economy can be substituted by division into centralized economy, more or less commanded and decentralized economy with self-control mechanisms.

A formal proof of existence of mechanisms of the classical economic system with social ownerships of means of production has been provided by *Vanek* [15]. *Lutz* and *Lux* [13] give examples of such systems (e.g. the Yugoslav economy before 1965). They also show in what way changes introduced in Yugoslavia in 1965 caused acceptance of solutions typical for the shortage economy.

If we take into account [13] and [15] and also the fact that so far nobody has given a proof of the impossibility of mixing mechanisms of the class of the demand-constrained

economy (of which the classical system is the pure type) with social ownership of the means of production, we can assume that there may exist a wider range of economic systems within socialism. This assumption also indicates rejection of the dogma that the market economy contradicts social ownership of means of production.

While comparing the two classes I do not take into account the form of ownership, but mechanisms and tendencies occuring in each of them. I assume that systems of both classes can function in the socialist country; *the shortage economy and the demand-constrained economy can be socialist economic systems.*

Preparation of production plans

Relations among resources, demand and production

A forced economy works under the pressure of forced quantitative growth. Superior authorities demand that firms reach the highest possible level of production. Quality and production costs are irrelevant. If a firm incurs losses, they are somehow covered. Practically, firms have no financial problems so their demand is not conditioned by solvency. Hence they do their best to acquire as many resources as possible and *this activity is rational in the shortage economy with soft budget constraint.*

The situation causes permanent shortage of resources and leads to:

– adjustment of production volume to the level determined by the scarcest resource,

– the use of substitutes for the scarcest resources, i.e. forced substitution of resources,

– production of goods which are not demanded, but production of which is possible, namely by forced changes of input combination.

The first form of a firm's adjustment to permanent shortage of resources causes fulfillment of its production plan on the highest feasible level. Kornai considers ([10] p. 34) a case of a firm, which receives or prepares (under pressure of its superior authorities) a production plan P that cannot be fulfilled. Figure 1 illustrates such a situation.

Input of four resources is illustrated in *Fig. 1.* The firm is not able to fulfil the plan P, because of shortages of resources 3 and 4. If the firm does not change the structure of

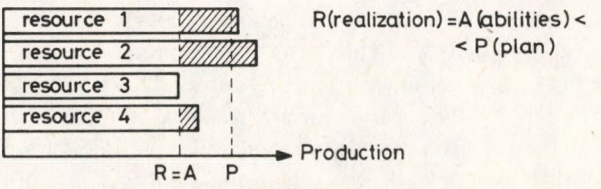

Fig. 1
Production determined by resources

input and/or output, the available resources make possible to attain production equal to R.

The case illustrated in *Fig. 1* can be compared with the procedure of preparation and realization of a plan in a demand-constrained economy. This is illustrated in *Fig. 2* see ([10] p. 25).

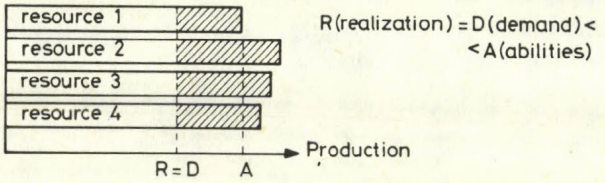

Fig. 2
Production determined by demand. Case 1

The firm fulfils its plan to R level. This level is determined by demand for the firm's goods. In such a case not all resources at the firm's disposal will be used. Production capacity determined by the amount of resources is higher—equal to A. The unutilized resources have been striped in *Fig. 2,* as well as in *Fig. 1.*

Analysis of both cases was one of the premises for formulating theorems (i) and (ii). If we compare both figures we will notice that in the demand-constrained economy all kinds of resources are not fully used. In the shortage economy at least part of resources is fully used, namely the scarce resources.

In the shortage economy additional supplies of resources (i.e. additional supplies of resource 3, in the case illustrated in *Fig. 1*) should cause an increase in production. If that is true, Kornai's hypothesis "immediately mobilizable slack: it is very low in production of the traditional socialist firm; much smaller than with the classical capitalist firm" ([10] p. 47) is true. Furthermore the control mechanism, i.e. plan bargaining results more often than not in a taut plan. In spite of the fact that firms want to have big amounts of resources and loose plans, the outcome of bargaining is a taut plan ([10] pp. 53–55).

Control mechanisms and production level

If plans were prepared on the levels shown in 3.1 and if they were fulfilled, we might try to prove theorems (i) and (ii). Let us notice though, that the case illustrated in *Fig. 1.* is only one of the possible variants. The firm can receive a plan which it fulfils or overfulfils without full utilization of any of the resources. This case is illustrated in *Fig. 3.*

The plan P is called by the superior authorities loose and thanks to the existence of control mechanisms, the plan for the oncoming period should be reformulated. It should be taut. Obviously, the superior authority can formulate a taut plan or can influence the firm to prepare it, but only if it has received adequate information from the firm. And

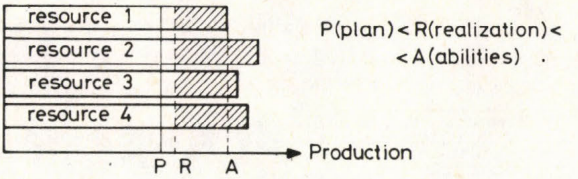

Fig. 3
Production determined by the control mechanisms of the shortage economy

obviously again, the firm will do its best to prove that the plan it received was not loose. A taut plan is a disaster for the firm and the profits the firm gains as a result of fulfilment of such a plan are almost the same as those gained after fulfilment of a loose plan.

When the firm operates in a rational way in the shortage economy, it must treat the unutilized resources not as slacks but as necessary reserves which enable fulfilment of future plans. These internal slacks are not mobilizable, they play a great role in decreasing the uncertainty in the production process (as well as in trade and in investment). This uncertainty is much bigger in the shortage economy than in the demand-constrained economy. Costs of purchasing and storing are irrelevant, the more resources the firm has the better its situation, so the firm strives to be well provided with resources.

The superior authorities control activities of the firm. They have at their disposal scarce resources. But the fact that they are dependent on information provided by the firm causes that their power in the process of plan preparation may prove to be an illusion. According to *Zawiślak* (he deals with centralized planning systems ([16] p. 116). "Planning decisions made at the central level of management of a given organization are beginning to reflect interests of their most influential elements. . . Often, an apparently huge centralization of planning leads in practice to subordination of the central level to high-handed ambitions of formally fully controlled organizational units."

Ambitions become particularly high-handed in the shortage economy. The firms are governed by their own logic. Their steps are rational and the objectives they try to achieve are the effect of institutional solutions and control mechanism. In the shortage economy objectives of firms are different from the objectives of their superior authorities. Nor should we forget that firms are not non-profit institutions, so they will not find it attractive to pursue objectives which are remote from their interests. And the center often demands from firms to do so; it appeals to social interest, reasons of State, etc. So far, however, attempts to create a hybrid which would bring profit and be a non-profit institution at the same time, have failed. Hence, in real life we can witness a situation described in *Fig. 3* rather than in *Fig. 1.*

The demand-constrained economy—quite unlike the shortage economy—enjoys the possibility of estimating demand accurately. If a firm has its demand estimated it will not buy more resources than necessary. There is usually an excess of production capacity and this enables adjustment of the volume of production to the volume of demand.

Furthermore, there is no need to store big amounts of resources. Practically, production is usually fixed on the level illustrated by *Fig. 4.*

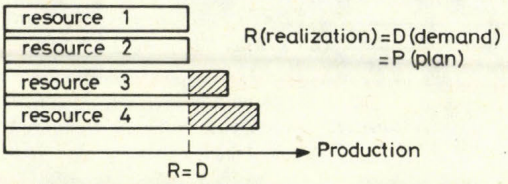

Fig. 4
Production determined by demand. Case 2.

In the demand-constrained economy firms adjust the amount of resources to the volume of production. They have hard budget constraints, they incur purchasing costs and costs of storing resources and that is why they only acquire the amount of resources which is necessary for production. Thus we have no grounds for saying that all the resources are unutilized, as indicated in point 3.1 (*Fig. 2*).

Tendencies in the shortage economy

Effects of plan bargaining

Plan bargaining is one of the basic control mechanisms in the shortage economy. Its results are similar to those of other bargaining mechanisms, e.g. investment bargaining, redistribution of income or credit bargaining.

The case considered in point 3.2 (*Fig. 3*) and reasons which I tried to outline and for which almost any quantity of resources is treated as necessary reserve, contradict the statement that the immediate effect of plan bargaining is a taut plan. Instead of taut plans, plan bargaining causes:

– *permanent lack of economic equilibrium,* chronic shortage, as pointed out by *Beksiak* and *Libura* [5] already in the 60s,

– *ineffectiveness of economy,* because bargaining means the highest input/output relation (proved by *Balicki* in [2]),

– *formulation of a plan which can be either fulfilled or corrected.* It can be corrected even after the term of its fulfilment expires; as an example we can quote in this place Poland in the 70s,

– *coexistence of shortages and surpluses of one and the same resource,* some firms have a given resource piled in their warehouses, others lack it.

Thus Kornai's statements about plan bargaining must be false. Even if a firm fully utilizes some of the resources, this might be the result of lack of economy, not of a taut plan. Actually, the objective surplus of these resources is used in order to force the

superior authorities to maintain supplies of resources on the same level in the future and in order to convince the superior authorities that the plan was taut. The result of this policy is inability to tell whether the scarce resources are in fact scarce or abundant. This policy also has an influence on values of such economic indicators as labour productivity, energy and material efficiency.

In the shortage economy economic indicators include not only the necessary use of resources, they also include use resulting from the forced substitution of a resource, forced changes in output combination, waste, deterioration in the quality of resources caused by storage, etc. During the planning process, real indicators are taken into account. Firms and authorities taking part in plan bargaining exchange information which is supposed to describe real economic processes. When these processes are not effective, the superior authorities have almost no possibility to prove it. Ineffective tendencies gather momentum and expand. The planning process in which plan bargaining takes place approves of these tendencies.

If we take into account real effects of plan bargaining we must agree with *Bauer*'s statement. He said "For many years Hungarian planning specialists have concentrated on the problem of sharing constantly present losses among different elements of accumulation and consumption. They seem to have forgotten that they should try to eliminate losses." [3]

From the above we can draw a conclusion that *Fig. 1* and *Fig. 3* can describe the same situation. The difference is in the input/output coefficients. *Fig. 1* includes real coefficients (including all kinds of wastages), and *Fig. 3* those coefficients which can be achieved thanks to technologies, resources and employees' skills and knowledge; thanks to better utilization of social capacity.

Six tendencies

The second form of instantaneous adjustment of economic activities to shortage is forced substitution of resources. It leads to ineffectiveness. Firms utilize the available resources (not those that should be utilized) regardless of cost. Thus they waste part of labour used for achieving a high quality of materials. Furthermore, the quality of products or semi-finished products may not meet buyers' requirements. Forced substitution causes losses, if not to the firms themselves–these will be covered by the state, the owner–yet on the national economy level. It also leads to increase in shortages and causes:

(1) *Tendency to waste resources.*

This tendency is the result of forced substitution, as well as:

(2) *Tendency to store resources, i.e. a hoarding tendency,* formulated in ([10] p. 101–102). Long storing of resources causes deterioration in their quality. Both tendencies are connected with:

(3) *Tendency to produce shoddy goods* noticable for both consumers and firms. Tendency (3) results from: forced substitution of resources, long storing of resources and institutional solutions (enumerated in part 6).

A firm's adjustment to permanent shortages leads to an engagement of knowledge and inventiveness or people whose only task is to "fix" materials, or to think of the way the available materials can be utilized. No doubt, that it means waste of knowledge and skills which might be used for organizational and technological development. Without these people, who perform their awkward functions, firms would not be able to function at all.

Employment of highly qualified staff, of people who are energetic and willing to "arrange and organize" leads to another tendency characteristic for the shortage economy:

(4) *Tendency to avert technical and organizational development.*

We cannot expect firms to be interested in development, if the existing technologies are "a constant bar". Common wisdom has it that technological development leads to strengthening technological "regime" and if material is of bad or simply different quality (than the technology provides for) the production process cannot be started.

Introduction of organizational development begins with preparation of a set of principles and with acceptance of some regular methods of dealing with the firms' problems. Even these basic steps are paralysed. In the shortage economy firms can always rely on the possibility of obtaining some more materials, money or staff by means of bargaining. They can never be sure though of the date of delivery and quality of ordered goods. They always face the threat of changes in the accepted plan and of the necessity to undertake new obligations, etc.

Introduction of organizational and technological progress is always a risk. In the shortage economy, risk is encountered by the firm, namely by the executives, but executives do not benefit from profits earned by their firm. Almost all the income from technological or organizational changes is taken from the firm.

Chronic shortage of some resources gives birth to efforts aimed at increasing production of these resources. Firms which produce them are under strong pressure but possibilities for increasing production are limited, due to an understandable lack of interest of firms in production "at any cost", shortages of other resources, etc. Efforts to start new investments are made and they are of course pointless in the case of fictitious demand. By fictitious I mean the kind of demand which is caused by all the above mentioned tendencies, especially by the hoarding tendency.

Increase in production achieved thanks to investments can substantially exceed demand (which was somehow estimated). Investments are made "in advance", under the pressure of forced quantitative growth. In some cases demand will not be met. Inability to properly estimate demand in the shortage economy, increase of the hoarding tendency or any other factor may contribute to this situation. Hence another tendency—the tendency to mis-allocate resources. This tendency is not restricted to investments. If we

take into account distribution of inputs which is carried out in a similar way, we can write that in the shortage economy there appears a

(5) *Tendency to wrongly allocate and distribute resources.*

The above mentioned tendencies do not embrace all the tendencies which can be found in the shortage economy. There is at least one more worth quoting after Kornai ([10] pp. 343–347), i.e.

(6) *Tendency to introduce modern technologies and modern organizational solutions in investment.*

This tendency contradicts tendency (4). Both of them occur in the shortage economy, though in different spheres–the first one in investments and the other one in production. Both tendencies strengthen shortage phenomena. Modern firms with new technologies cooperate with the old-fashioned ones utilizing old machines, even those from the 19th century.

Utilizing social capacity

Now, keeping in mind means of determining the volume of production in the shortage economy and all the tendencies we can notice, that:

There are no grounds for saying that the level of utilization of social capacity is high in the shortage economy.

In the demand-constrained economy all the tendencies, except [6] may occur only as temporary phenomena. If we additionally take into account relations between the volume of production and abilities (see *Fig. 4*), we may say that:

There are no grounds for saying that the level of utilization of social capacity is higher in the shortage economy than in the demand-constrained economy.

Both statements contradict Kornai's theorems, though they do not explain the problem fully. If we take into account the tendencies formulated in point 4.2, we may add that:

(a) *Social capacity is not utilized effectively and first of all not economically in the shortage economy.*

If we remember the conditions in which firms operate in both economic systems we may say that:

(b) *Production capacity is utilized effectively and economically in the demand-constrained economy at the microeconomic level.*

(c) *Production capacity is utilized ineffectively and uneconomically in the shortage economy at the microeconomic level.*

Note that statement (c) follows statement (a).

Now we face the problem of tautness of utilizing social capacity. Statement (a) does show that it is not taut but statement (b) does not show that it is taut.

In the two economic systems workers understand the tautness of utilization of capacities in different ways. That is, if we take as Kornai does–utilization of social

capacity from the social point of view (how does the society see it) we can formulate the hypothesis that:

(d) *The level of utilization of social capacity is considered low in the shortage economy, in fact lower than in the demand-constrained economy.*

The proof of this hypothesis is only partly given by Kornai. Moreover, he does not refer to a pure type of economic system, but a deeply reformed one. Writing about the Hungarian system, he says that society believes that resources (raw materials, labour, etc.) are constantly being wasted and that social knowledge, skills and energy are not utilized as they should or could be ([10] p. 55). Similar statements were formulated by other economists who wrote about different types of the shortage economy (e.g. [6], [9], and [12] p. 644).

We cannot draw the conclusion from (c) that people living in the demand-constrained economy are of the opinion that the level of utilization of social capacity is high in their system. Especially the unemployed and those who work in plants which use only a (low) percentage of their production capacity, must feel differently. We can say that there are opportunities for better exploitation of capacities in the demand-constrained economy. Furthermore we can say that there are opportunities for better exploitation of social capacity (e.g. if we fully utilize abilities of the system).

Changes in normal conditions

The above mentioned tendencies of the shortage economy as well as those formulated in [10] and omitted here (e.g. inflationary tendency) are the result of institutional solutions, i.e. soft budget constraints of firms and hard ones of consumers, subordination of firms to superior ,authorities and strict control of their activities, elimination of self-control mechanisms and existance of such mechanisms which are subject to bureaucratic manipulation.

Three types of control mechanisms can be distinguished in the shortage economy. The first type is the one outlined above, i.e. the bargaining mechanisms. The second type may be called the mechanisms of bureaucratic regulation. The clearest examples here will be central distribution of inputs and outputs, employment policy and wages and prices policy. The third type may be called intervention mechanisms. Kornai [10] calls them "putting out the fire", they are used in the case of danger, when normal conditions are violated.

These three types of control mechanisms also occur in the demand-constrained economy. But the number of mechanisms within this class of economic system is not limited to these three. There are also self-control mechanisms. Some of the earlier mentioned types of mechanisms have been built into the economy so that self-control mechanisms can function efficiently (e.g. certain bureaucratic mechanisms enable maintenance of competition).

In the shortage economy bargaining mechanisms, mechanisms of bureaucratic regulation and intervention mechanisms are the only control mechanisms and they have no self-control features.

Control mechanisms are based on normal and critical conditions, these conditions reflect an accepted situation, in the case of normal conditions, or an unaccepted situation, in the case of critical conditions. By accepted we understand here accepted by society and/or the state. Hence the question: does long-lasting functioning of the shortage economy lead to a different understanding of normal and ciritical conditions?

Let us consider, e.g. the problem of redistribution of incomes. In this redistribution the bargaining mechanism leads to levelling the positions of all the firms. From firms, which fulfil their plans, make profits and are efficient quite a part of their revenue is taken away. "Bad and lazy" firms, which incur losses, obtain money to cover their losses. Moreover, thanks to bargaining, they can get money so that they can pay their employees more than other firms can. Similar cases can be observed on lower (among employees) and higher levels.

Furthermore, the bargaining mechanisms lead to lack of interest in efficient work, to indifference and to passive attitudes during production and trade processes. These attitudes are accompanied by stresses, nervousness and tensions. Permanent shortage of consumers' goods strengthen pathological tendencies in society. They contribute to corruption and disintegration of society. The stronger the above mentioned economic tendencies and the stronger the pressure on quantitative growth, the stronger become pathological tendencies in society.

Changes in social attitudes caused by the shortage economy are reflected e.g. by society's refusal to support forced quantitative growth, by differences in understanding the term "normal conditions". Normal conditions are gradually becoming understood as critical conditions. Now, we can formulate a hypothesis that in the shortage economy there is a

(7) *Tendency to change normal conditions into critical conditions.*

We should note, that the change in understanding conditions can take place despite economic development. Simply, social costs of development can be considered too high for the effects they bring.

The center may fail to notice the change in society's understanding of normal conditions. Even if it notices, it usually has limited possibilities to do something to maintain normal conditions. In such a case the center uses the intervention mechanisms, but the problem with these mechanisms is that the more often they are used the weaker their effects are. They also lose their potential when slumps or economic tensions are high and widespread. The intervention mechanisms will not cause return to normal conditions, if critical ones have appeared in many spheres. They do not work, if they are applied too late or if they only postpone appearance of critical conditions.

We can illustrate this problem with an example taken from the Polish economy. At the turn of the 60s and 70s Poland was stricken by critical conditions. They were postponed by e.g. imports of consumers' goods. At almost the same time technological

progress (result of forced growth) was introduced on a much broader scale than ever before. This should have caused appearance of critical conditions in the mid-70s. But it was postponed again by means of further increase in imports of consumers' goods, raw materials and materials. The latter were necessary for newly built plants. The intervention mechanisms (which were behind the import decisions) strengthened tendencies described in part 4 and contributed to appearance of tendency [7]. They also caused broadening of spheres stricken by critical conditions. Consequently, in the late 70s the center appeared to be deprived of any effective intervention mechanisms. Finally, at the beginning of the 80s, normal conditions were established on a new level. It was the level of the formerly critical conditions.

The above example illustrates one cycle of development of the shortage economy. If this cycle is repeated, namely, if the hypothesis about tendency [7] is true, its effect will be establishment of normal conditions on the level of the formerly critical conditions.

At the end of this article I would like to stress one point–all the reforms of the shortage economy which have been carried out so far merely weakened tendencies which result from the low efficiency of the system. Kornai admits it [10] and notices, that the tendencies appear in spite of the fact that the policy of the center is cautious and pragmatic. The tendencies result, first of all, from the fact that the shortage economy is not equipped with self-control mechanisms, that its mechanisms are instruments of bureaucracy and are not naturally linked to economic processes.

Mechanisms of the shortage economy are the effect of institutional solutions, though many of them are not institutionalized themselves. Because of this, bargaining and intervention mechanisms are not subject to outer control. Although they play a very important role in economy, they perform their functions "in concealment"–no rules or principles have been worked out for them. Meanwhile, experience of the capitalist countries (connected with co-management or participation) shows that only institutionalization of bargaining mechanisms enables their efficient utilization in the process of socio-economic development.

A similarly important role is played by self-control mechanisms. On the other hand, they weaken faulty decisions of the authorities, and these can always be made, despite caution and pragmatism. On the other hand, self-control mechanisms force economic policy makers to prepare a policy which can be implemented and which will have the real support of producers and consumers. It is producers and consumers who have influence on these mechanisms. If the authorities understand the fact that society must accept their economic policy and if they create conditions for people to satisfy their needs and wants, they also understand the necessity to introduce self-control mechanisms and the necessity to institutionalize bargaining mechanisms.

References

1. Baka, W. et al.: Planowanie gospodarki narodowej. PWE, Warsaw 1978.
2. Balicki, W.: Nierównowaga popytowa jako właściwość dyrektywnego systemu zarządzania. (unpublished) Instytut Planowania, Warsaw 1979.
3. Bauer, T.: A második gazdasági reform és a tulajdonviszonyok (The second economic reform and the ownership relations). *Mozgó Világ*, 1982, 2, pp. 17–43.
4. Beksiak, J.: Zmiany w gospodarce. PWN, Warsaw 1982.
5. Beksiak, J. – Libura, U.: Równowaga gospodarcza w socjalizmie. PWE, Warsaw 1969.
6. Gliński, B.: Zarządzanie gospodarką narodową. PWE, Warsaw 1980.
7. Gościński, J.: Sterowanie i planowanie. PWE, Warsaw 1982.
8. Iwanowska, A.: Dynamika systemu zarządzania gospodarka, KiW, Warsaw 1982.
9. Józefiak, C.: Uwagi w sprawie związków miedzy systemem politycznym a efektywnością gospodarki. (unpublished) Warsaw 1982.
10. Kornai, J.: *Economics of shortage.* North-Holland, Amsterdam 1980.
11. Koźminski, A. M.: Organizacja i planowanie. PWE, Warsaw 1978.
12. Lipiński, E.: Problemy, pytania wątpliwości. Zwarsztatu ekonomisty. PWE, Warsaw 1981.
13. Lutz, M. A. – Lux, K.: *The challenge of humanistic economics.* The Benjamin Publ. Comp. California 1979.
14. Nasiłowski, M. et al.: Ekonomia polityczna socjalizmu. KiW, Warsaw 1981.
15. Vanek, J.: The basic theory of financing of participatory firms in: *Self-management* (Vanek ed.), Penguin, Baltimore 1975.
16. Zawiślak, Á. M.: Organizacja i planowanie, PWE, Warsaw 1978.

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OBITUARY

IN MEMORIAM JENŐ WILCSEK

In January 1984, at 86 years of age Jenő Wilcsek passed away. His career, his rich and diversified knowledge, his role in the preparation and introduction of the reform of economic control and management were equally remarkable. He was born on 19th December, 1898, in Budapest. He studied in Budapest and obtained his degree in law there. He was for several decades a leading official and later commercial manager of the Antal Oetl Iron Foundry and Machine Building Factory (today Áron Gábor Machine Building Factory). During this time he also acquired thorough experience in the technical and technological questions of engineering in addition to his knowledge of law and economics. When the firm was nationalized, the new manager (János Csergő, soon to become minister of metallurgy and engineering – appointed him deputy manager. Not long afterwards he was transferred to the National Office for Materials and Prices and later to the National Planning Office where he worked in various jobs till 1957.

He participated in the introduction of the uniform accounting system and had an important role in the training of chartered accountants. For a short time he was manager of the Bureau Organizing National Enterprise. In matters of accounting, prices, organization and business economics he was considered among the best experts in Hungary and during his long years in the National Planning Office he added to this a rich knowledge and experience in planning.

In early 1957 he joined the work of reconstruction of the economy and became a member of the commission, led by István Varga, which worked out the basic principles of a new system of economic control and management better reckoning with market relations. Relatively little was realized from these proposals then or in the next years, but he returned to this theme in the course of preparing the 1968 reform of economic control and management when he worked out a remarkably comprehensive concept. From 1957 till 1968 he was professor of industrial economics at the Karl Marx University of Economics. He had more than 200 publications, among them several books. Several of them provided a basic orientation at the time of publication, and some of them are still being reprinted. At the university he educated generations of new teachers and he was the editor of the only Hungarian textbook on industrial economics.

He retired from the University at the age of 70 but in such good physical and intellectual condition that he could accept an invitation to become manager of the newly organized Financial Research Institute. He was manager until 1975 and for a further 3 years adviser to the Minister of Finance. It was then, at the age of 80 that he finally retired and only seldom appeared at and contributed to scientific conferences and

meetings in the Industrial Economics Committee of the Hungarian Academy of Sciences or the Hungarian Economic Association.

As acknowledgement of his diversified knowledge, he was a member of three committees of the Hungarian Academy of Sciences: the Economics, the Industrial Economics and the Organization Science Committees. For long years he was member of the Theoretical Economics Working Group of the HSWP, chairman of the Industrial Section of the Hungarian Economic Association. Beside several other decorations, he obtained the golden medal of the Order of Work on three occasions.

His huge experience secured him a special role in the preparation, introduction and further development of the reform of economic control and management. He not only was an acknowledged expert in technical and financial, micro- and macroeconomic questions, but he had personal experience in capitalist management techniques as well. This is why his proposals were always characterized by a great sense of reality; he well knew the limits to planning and the pitfalls of direct control, but he had no illusions regarding the operation of the market either.

He took individual standpoints in several questions and stuck to them. In a study he was the first to prove that inflation was also possible in a socialist economy and emphasized that inflation had to be better controlled in the Hungarian economy. He represented the standpoint from the very beginning – also in the course of the preparation of the reform – that it is not correct to link the increase of wages to profits. In his opinion, wages had to be controlled centrally (this is how the constraint of profit prompts the raising of labour productivity), and the interest of workers in profits could be adequately secured through profit sharing. He was among the first who objected to the exaggerated centralization of enterprise organizations but, at a meeting of the Industrial Economics Committee of the HAS in 1983, he also discarded the mystification of the role of small firms.

Unfortunately, he cannot participate any more in the further development of the system of economic control and management now under way. We have to do without his well founded knowledge, free from extremes. His work through almost four decades after the Liberation of the country resulted in many values to be preserved, and many lessons to be learnt. He contributed several articles to this periodical and was always ready to give advice. His followers and many disciples will preserve his memory.

DR. IVÁN GÖNCZI (1922–1984)

Dr. Iván Gönczi, Doctor of agricultural sciences, professor of agricultural economics and agricultural business economics, member of the Agricultural Economics Committee of the Hungarian Academy of Sciences and the Ministry of Agriculture and Food Industry, and member of the Editorial Board of Acta Oeconomica died unexpectedly on May 23rd, 1984, at the age of 62.

Professor Gönczi graduated in economics from the Bolyai University in Kolozsvár (Romania) in 1946 and got his doctor's degree there, too.

His first job was with the newly organized and dynamic economic policy making body, the Economic Council in 1946 and he participated there in the elaboration of the first three-year plan. After that he continued postgraduate studies with a scholarship in France. On returning home he worked in various party and government jobs dealing with the control of agriculture and was engaged in problems related to cooperative policy, agricultural credit and subsidies, and later agricultural business economics. For two years he was manager of a machine and tractor station.

He spent more than three decades in teaching, which included 27 years as associate professor and later as professor at the University of Agricultural Sciences at Gödöllő. His interest in theory was coupled with a healthy practical approach and experience. Beside teaching and educating whole generations of agricultural economists, he published several books and a great many articles. He was never statisfied with generalities and devoted his attention to detail. He was critical of fashionable trends. Beside textbooks and university notes worked out with his participation, separate mention should be made of his "Production systems in industrializing Hungarian agriculture" published in 1978, in which he discusses the impact of the scientific and technical revolution on agriculture not only from the economic point of view but also in a systems approach, and of his "Hungarian agriculture at the threshold of a change of epoch", published in 1980, in which the reader is faced with the dilemmas of Hungarian agricultural policy.

He was also actively involved in directing research aimed at the organizational development of the system of economic control and management. His work in this field is outstanding.

His diversified scientific and educational activities earned him several high decorations. In 1963 he obtained the degree of Candidate of Sciences, and in 1971, that of Doctor of Sciences.

His death is a great loss not only to higher agricultural education and research but also to this periodical, as he was a member of the Editorial Board through two terms. We shall preserve his memory.

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BOOK REVIEWS

BRÓDY, A.: *Lassuló idő: A gazdasági bajok magyarázatához* (Slow down: About our economic maladies). Budapest, 1983. Közgazdasági és Jogi Könyvkiadó. 166 p.

This recently published book by *Bródy* consists of a compilation of chapters speculating on the sources of the economic stagnation in which he argues the entire world economy is mired. The speculative style which offers a fresh perspective on a much discussed issue stands in contrast to his more systematic and carefully footnoted books, "Proportions, prices, and planning" (1970) and "Cycles and controls" (1980). Clearly the same perspective and methodology that he borrows from *Leontief* and *Marx* which provided the theoretical foundation of the earlier two books is again present in this one, and is effectively the basis and strength of the original thoughts which he advances. Along with this, the book stands as a culmination of experiences which he gathered in different positions: as a developmental economist in Zambia; as a participant and director of input-output projects with Leontief and at Battelle Laboratories in Ohio; as guest lecturer at several universities; and at the senior position which he now holds at the Hungarian Academy of Sciences.

This book poses itself as a challenge to the more orthodox theories which view economic growth as a simple function of national income, such as in the tradition of *Kalecki, Harrod* and *Domar*. The basis of Bródy's criticism rests on his argument that economists have tended to use this easily quantifiable variable and hence have been limited in adequately describing the dynamic of economic growth. According to Bródy, growth involves a more complex interaction of factors, some of which are controllable and others of which are rooted deeply in historical processes. In applying this approach, he views the development and expansion of the advanced capitalist countries in the past thirty-five years as an exceptional case dependent on specific cyclical factors present in the post World War II period. As some features of this long cycle are now exhausted, there is a tendency for the elements which once came together to produce growth, to diverge and create what he refers to as a 'growth scissors'. This is the essence of how he approaches the current slowdown.

The more traditional approaches view growth as some kind of exponential increase of national income or as an incremental advance in the quantity and efficiency of investments or capital intensity. They also base their analysis on an assumed equality between savings and investment. But Bródy notes that the crucial variable, time, is omitted and with its ommission, this leads to the unreliability of the capital coefficients. He argues that difficulty arises from directly correlating an increase of wealth with the increase of production. Bródy points out that the opposite could be occuring, i.e. wealth could be increasing while production is declining. From this point, be begins his questioning of the whole assumption that the portion of national income accumulated for investment is the only means for initiating and achieving growth.

Bródy provides a simple but interesting example of economic growth from his work experience in Zambia. He takes a country which is by comparison to European standards on a lower level of development, and he poses the question whether or not the process of development is to be understood from the point of view of the importing of plant and equipment or if it is to be better understood by a certain

educational and institutional standard of the population. Bródy argues that the process of education of a population alone may be the costliest development program with the slowest return on the capital invested. He gives an example.

To raise the literacy level of a country's population which is eighty percent illiterate—if ex-patriots are not to be relied on solely—first teachers must be trained, and then, only after a lag of some years can they teach others to read. For secondary and university level training, this requires first the time necessary to train a generation and then to teach their knowledge to the second. Under optimal conditions, the first generations of primary, secondary, and finally university trained by those within their country requires the larger part of a century.

Bródy's statistical record argues that in the case of the U.S. economy, there is twice as much capital invested into consumer durables as into manufacturing equipment. He says, "Only about one-third of national wealth is the property of actual enterprises while the remaining two-thirds of the wealth are in personal or collective possession" The education and training of the population necessary for smooth growth is more than twice that of the value contained in the plant and equipment, and this sums to a total of seven years of national income. In short, Bródy concludes that about half of national income is spent on the reproduction, supply, and maintenance of the work-force.

He stresses that the importance of this investment cannot be over-emphasised. In fact, Bródy attributes that a major aspect of the current decline results because this dominant investment which determines the ultimate degree and rate of growth is being neglected. He bases his bleak projection for the future on the problems in the institutions of education and research which are essentially fountains which have run dry and now are a determining source of world stagnation.

Other factors accounting for the growth scissors and resulting deceleration stem from the specific nature of the growth process within larger historical processes. Bródy sees these as:

a) With the expansion and the almost complete transition to capitalist production, growth rates, which for a time rose as more elements were absorbed into more efficient production systems have reached the logical end of this process. The creation of the work-force, i.e. the commoditization of wage labor has been mostly achieved, and consequently the rapid productivity increases characterized by moving from pre-capitalist to capitalist production are no longer possible.

b) The share of past labor in the value of the product has been climbing and the amount of intermediate products entering into production is coming to account for fifty to sixty percent of total costs. Characteristically, a scissor developes as this growth of inputs is faster than the growth of production.

c) Bródy accepts Marx's tendency of the rate of profit to fall and argues that the speculation on land values and other commodities during the recent years has resulted from the stagnation of profitability in production.

d) He also accepts the conclusion of A.P. *Carter*'s study of the American economy which notes the decline in the growth rate of capital intensity beginning in 1939. In combining the two, Bródy concludes that the slowdown in the rate of growth and the falling of the rate of profit are historically inevitable.

From a macro-historical perspective, Bródy argues that the ground-work for the rapid advancement of science and material productivity in the 19th and 20th centuries was only made possible by the intellectual advances of the Enlightenment of the 17th and 18th centuries. From this, he adds that there has been no intellectually or culturally fertile period equal to this which can provide the stimulus for another spurt of growth. As Bródy stands by the belief that we can consider the increase in productivity as one of the most stable indicators of the degree of developmental inertia over the long-run; accordingly, humankind is currently failing at its task. One point which Bródy confidently supports is that the intellectual reserves of technical development have been in the process of been exhausted for a fairly long time. These declining growth rates are a sign of deeply rooted problems at the heart of institutional processes. In this respect, too, the problems of the planned economies exemplify that planning clearly has

definite limits and is currently failing in this respect of maintaining high levels of growth.

In a closer examination of cycles, Bródy concludes that the length of the economic cycle is proportional to the square root of capital intensity and the gestation period. Here he refers to the hog cycle developed by Gábor *Kornai* first in Hungarian agriculture and expanded for comparative purposes to hog production on the communes in China, and of cattle by the untouchables in India. In all cases, Bródy points that there is a definable relation between reproduction time of the species and other factors such as crop production, with gestation playing a determining role. This cyclical approach, when applied to human society stresses that particular periods of growth and stagnation are built into the system by demographic factors. Bródy uses the category of Easterlin cycles: developed by Richard *Easterlin* which are based on an analysis of population growth, formation of the labor force, and their role in long cycles. These periods, for more than coincidental reasons, so argues Bródy, conform with the forty to fifty year cycles of duration derived by *Kondratiev*. From this, the population cycle and the needed absorbtion of capital in the development of those prior to working age, and the maintenance of those after working age, are the main drain of resources from the system. And this, according to Bródy, is the primary factor determining these long cyclical down-turns which conform with Kondratiev's.

In this short book, Bródy manages to pull together a number of theoretical strands into what is a uniquely different approach to the theory of growth and economic cycles. Hence, this is a challenging contribution to the different explanations of the period which has been called both stagflation and slump-flation since the 1970's.

By the relaxed structure of the argument—often in the first person—the book does not appear to be intended as the final word on the issues, and neither does it appear likely that this will be Bródy's final conclusion about this economic period. But this lack of definiteness and finality, however, does not undermine the fact that he clears a new and interesting theoretical path and turns over most of the stones along the way. One could feasibly pick through his argument and find disputable and unresolvable questions and even weaknesses in his interpretations. But to scrutinize too carefully all of the single points is to miss the cumulative synthesis of ideas which are highly coherent and should be recognized as an original contribution to understanding the nature of the long lasting crises in which the advanced capitalist, socialist, and third world countries have all been enmeshed.

To wit, the freedom of his style allows a far ranging speculation within his chosen theoretical limits. However, one who is accustomed to more scientific—or better documented and footnoted arguments—could be disappointed by the limited number of references and the rather causal way of, for example, equating what he finds through his mathematical formula with Kondratiev's. Simplifying the current stagnation by propounding that, yes, Kondratiev was right, we are in a wave of cyclical downturns, and secondly, saying that the cycle that he discovers is indeed Kondratiev's cycle probably stands as the weakest point in the book. Bródy skirts around the fact that the similiarities between his human hog cycle and Kondratiev's long waves are equatable only in terms of time-span, never noting the differences in their respective methodologies and the deeper meaning of their dismal conclusions. Though this which may appear as error may also be overlooked as a by-product of a far-reaching mind at work. His elaborating this correlation more carefully or posing it as speculation could easily eliminate this short-coming.

One policy related aspect of his theoretical perspective provides a criticism of the current "social programs" stemming from *Friedman*"s monetarism which have been implemented in the U.S. and England. Bródy argues that the conservative approach to slackening growth which seeks to trim the educational, health, and welfare budgest will, in the long-run, only aggrevate the problems. Likewise, the forced industrialization strategy of the socialist countries which focused on increasing national income by encouraging the basic material sectors at the expense of consumption has also been in error. Bródy notes that restricted consumption works

to the detriment of the "enchanced reproduction of the work-force," and ultimately the resources necessary for growth can be depleted by the strategy.

To not fall into the deterministic mold of succumbing to Kondratiev's bleak prophecy of the down-turn of long waves which cannot be reversed may require more than what Bródy implies would be necessary as counter cyclical policy. Stepping up the advancement of research and education, the two factors which Bródy sees both as the problem because it is the draing of capital on the system for demographically determined reasons, and as the only solution for making the necessary break-throughs for increasing productivity and economic growth is not solved within the confines of his book. The implication of demographic determinism leaves us the option of waiting for the Easterlin cycle to work itself out. But what are the possibilities for fueling the human sources of growth during demographic periods when national wealth is stretched thin? These are the main questions posed by the book, but which are not addressed in any detail. This could be an interesting beginning point for Bródy's next book.

J. B. HALL

TÍMÁR, M.: *Gazdasági egyensúly és pénzügyek* (Economic equilibrium and finances). Közgazdasági és Jogi Könyvkiadó, Budapest 1983. 232 p.

The first remark to be made about this treatise concerns the title given to it. The maintenance or restoration etc. of economic equilbrium became namely the "topical alarm signal" in Hungary at the end of the previous decade. On this account the problem of the balance of the domestic economy or of the budget, of virtually the same rank as the equilibrium position in external markets, has been degraded into a secondary circumstance. The title of the new book by Mátyás Timár, President of the National Bank of Hungary, indicates that the *entire economy* must be balanced to carry out the tasks of the national economy. A good many of the studies have already been presented to a narrow or broader public in some form. Therefore, the place and date of the original publications are stated everywhere, giving most valuable information to the reader, especially if the collected discourses and interviews are read sometimes one and a half decade after their first publication.

The lasting validity of the studies i.e. the lasting validity of problems is already shown by the first paper analysing the impacts of the raw material crisis. This article, published in 1974, notes that the improvement of equilibrium was already then topical problem. It was essential as early as then to transform the production pattern of the national economy and of enterprises, and that already ten years ago steps ought to have been taken to stop the production of uneconomic commodities. At that time, Mátyás Timár wrote as follows: ". . . efforts should be made to discontinue the production of these commodities and the involved tasks of reorganization must be solved with great care and circumspection."

Reading the ten or fifteen-year-old papers with the mind of today, each one seems to be a sort of a warning. The study published about selective development policy in *Közgazdasági Szemle* in 1973 already raised the relationships between the rate of development, technological standards and economic efficiency. And again the problem of equilibrium: "Experiences show that the *stepped-up rate of development* leads to a deficit both in the balance of foreign trade and in that of payments. The correlation between investment and the balance of payments is very close and it asserts itself in a short period of time. Mostly this is the reason why Hungarian development has not been free from cyclical phenomena during the past two decades. A look at the annual increment of investment will be sufficiently convincing. Figures show that periodical upswings and the robust boosting of investment result in a growing deficit in the balance of payments. Such periods are always followed by a few years when investments must be cut back."

The first main part of the book, divided into three proportionate sections, scrutinizes general issues of the economic policy and also contains a review of the living conditions of the labour class–completing the aforesaid problems. Analysing family incomes and their distribution the

author deals with the trends of price rises: "we will have to try to keep the increase of prices within planned limits also in the future, and it must also be understood that especially in an economy so much exposed to external economic influences like ours, certain changes in consumer prices must be inevitable."

The treatise closing part one discusses the *updating of the system of economic control and management.* The author accentuates one of the essential elements of his train of thoughts also in a sub-title (Compromises and their impacts). He points out that ". . . the reform contained several compromise solutions. The compromises hindering the full assertion of the reform are attributable chiefly to the aversion to differentiated incomes and reflect the disagreements existing in this field". The further development of the system of control and management naturally cannot be independent of the world economic environment. For this very reason it is imperative to recognize the objective trends of the world economy and to have certain of its components acknowledged in the Hungarian economy in order to adapt and adjust ourselves to the world economy.

The second part entitled *"Industrial policy"* deals with the correlation between economic development and modern industrial development. Naturally, also this part contains studies about symptoms of the world market and their impacts on Hungary. In a structurally open economy, the transformation and improvement of the structure must be the richest reserves. Therefore Mátyás Timár rightly states: "it is the task of enterprise strategy to respond flexibly and promptly to new market conditions and to price changes in the world market."

In the context of world market impacts it must certainly not be forgotten that the best chances of foreign economic relations are offered by the division of labour with the *CMEA member countries* and in this context, it is important to know that "the structural changes that have taken place in different countries require decisions of a new type in numerous fields of cooperation. . . . It is the task of the economic leadership to carefully analyse these changes and to draw the corresponding conclusion in due time for the shaping of foreign trade relations in the context of development programmes."

The third part of the book deals with *banking and credit policy.* The problem of the *exchange rate system* is touched upon in almost every study on the credit political principles of the past five-year plan, on the evaluation of our international credit policy and the bank and credit political chronicles of each year. In 1981, Mátyás Timár wrote the following in connection with making unified the rate of exchange of the Forint "The gap between domestic producer prices and world market prices has gradually been decreased whereby the preconditions for introducing a unified rate of exchange are established from the side of the price system . . . we must make the price system more strongly value-proportional and adjustable to world market trends". The problem of the *convertibility* of the Hungarian Forint is considered from time to time in connection with the rate of exchange as well. A chapter of the book contains a BBC interview with Mátyás Timár in which he spoke about convertibility as follows: "The next step is to achieve the restricted convertibility of the Forint in the current account and there has been some progress already. This means that at a certain time—it is not yet decided when—a certain part of our foreign trade will be financed in covertible Forints. Hungarian economists study question in countries with similar problems in the past, like Austria, Finland and Yugoslavia. We do not expect this to bring about any fundamental change in our foreign trade but we suppose that within certain, modest limits it will be possible to use the convertible Forint already beginning with its introduction."

After this interview, however, world economic conditions have profoundly changed and, consequently, so have the preparation of Hungary for the introduction of convertibility. Hardly one year later, in 1983, Mátyás Timár, understandably, spoke differently about the timing of the Forint convertibility: "The international political, economic and financial situation . . . has so developed that this is not the right time to introduce the convertibility of the Forint. The general uncertainty that has emerged in currency markets suggests that this step should not be hastened."

The accession of Hungary to the *International Monetary Fund* and its sister institution the *World Bank* has attracted the attention of Hungarian as well as foreign experts in the past years. It is logical that the President of the National Bank of Hungary made more than one written and verbal comments about this important step before and after it was taken: ". . . last year it was found that time had come. For several years we had transacted a considerable volume of trade with the developed, industrialized western countries. About half of our foreign trade is related to the socialist countries while the other half to the developing and especially to the Western countries. This involves that we must pay more attention to the monetary terms and conditions of the Western partners in our financial system. This is why we have given more room in recent years to market conditions and to the world market price system. We formed a uniform rate of exchange and plan to introduce restricted convertibility of the Forint for the current account. All of these factors meet the objectives of IMF, too. This is why the economic leadership . . . found that it was time to make steps in this direction."

The closing study of the volume gives a *coprehensive evaluation* of economic developments in the last ten years and especially in the early 1980s. One of the main messages of this chapter is to present the tasks and measures which are absolutely necessary for improving the external equilibrium position of Hungary. The author mentions among others the devaluation of the Forint against convertible currencies as one of these factors.

The lines concluding the chapter shows that Mátyás Timár is aware of the problem the reader faces in digesting papers written much earlier. "Of course, in the light of present-day information many a things appear to be obvious, but these things were not evident when they had been written". He correctly states that "it is always difficult to make corrections afterwards, especially when the environment becomes more complex".

In conclusion, let us quote the closing idea of the book by Mátyás Timár world by word because it could be a motto at the beginning of the treatise: "We are even more strongly forced by the present situation to structural transformation and to enhanced efficiency. This coercion has a positive facet as well: activity and enterprising spirit have been strengthened and marketing work has been improving. The old proverb, that the palm tree is getting stronger under weight, is very apt."

M. BRÜLL

NYITRAI, V. *A népgazdasági hatékonyság és tartalékai* (The efficiency of the national economy and its reserves). Kossuth Könyvkiadó, Budapest 1983. 296 p.

The criteria of evaluating economic performance have radically changed in Hungary in recent years. Previously the rate of growth used to be the most important one while now the first place is given to external economic equilibrium. It has, very correctly, become general to consider the efficiency through which these prominent economic policy goals are achieved. Special importance is lent to this point by the fact that the short and long-term requirements of efficiency are often suppressed by efforts at maintaining external economic equilibrium and international liquidity, and this causes new problems. The book of Vera *Nyitrai*, President of the Central Statistical Office thus deals with one of the acutest problems of Hungarian economic development by scrutinizing the aspects of national economic efficiency.

The book consists of an introduction and six chapters. Despite its brevity the *Introduction* contains very important points. First of all, the notion of efficinecy as well as its main relationships with other economic categories are clarified. Economic efficiency is assumed to be primarily a national economic category and the result per unit of total input of resources is considered to be its most important indicator. It is distinguished from business efficiency, profitability and productivity, the latter being treated as a partial indicator of efficiency.

The following important statement is made in the *Introduction:* "It is necessary from the point of view of the functioning economic mechanism that the difference between enterprise efficiency and national economic efficiency be of an extent

that can be monitored, measured and reckoned with. This will only happen when the price and regulatory mechanisms function as binding agents making national economic efficiency clearly felt in the enterprise sphere." (p. 13) This requirement, however, is not fully satisfied, furthermore: ". . . the economic efficiency of the units of production is not simply aggregated in the national economy. Relationships between the efficiency of the various economic units are far more intricate than that." It follows that "efficiency on the enterprise level cannot be in itself a suitable measure by which the activity of a given enterprise is judged as necessary, to be developed or on the contrary, as one to be supressed. Realistic assessment is only possible in the context of the entire socio-economic process." (pp. 14, 15)

According to the second essential theorem of the Introduction efficiency should be analysed with the aid of systems of indicators and these indicators must be measurable, expressed in numerical terms, and analysed in their interconnections on the different levels of the national economy, i.e., in the marcro-, mezo- and micro-spheres. Another important recommendation states: "A realistic assessment of domestic activites necessitates to examine . . . beside the actual efficiency indicators also the *trends shown by the efficiency indicators corrected for the changes in the terms of trade* during different periods of time, because in this way the improvement or eventually the deterioration through international exchange can be separated from the efficiency of activities which are exclusively domestic ones." (p. 21) In the following these methodological theorems are used in a convincing and consistent manner.

The solid composition of the treatise is so structured that *Chapters 1* and *2* analyze the development of national economic efficiency (before the 1970s, in the 1970s and the early 1980s) while *Chapter 3* is an analysis of the development of efficiency in an international comparison. Efficiency is analysed at length in the main sectors of the national economy in *Chapter 4, Chapter 5* is a study of the efficiency of the whole production process and the closing Chapter 6 is devoted to the social aspects of efficiency.

Chapters 1 and *2* which are in close unity show how, after depletion of the reserves of extensive development, the Hungarian national economy tried to take the path of intensive growth as from the late 1960s which it could not accomplish but with little success also because of the adverse changes in external economic conditions. Complex efficiency has not grown in the Hungarian economy since 1978. However, if changes in the terms of trade are also taken into account, the break actually dates back to 1974 or 1975. Many other examples are also given, proving that the Hungarian economy faced serious difficulties already in 1974–1975–1976 but economic policy failed to take them duly into account at that time. "Thus a number of factors retarding healthy development were working in the background of apparently favourable efficiency and at a time when indebtedness was increasing." (p. 45) "Upon the restriction of the newly declared conditions (competitive prices, normative regulation) in order to shift to the new growth path, "the enterprises responded in the old and from their point of view successful way, namely, again by stockpiling and by accumulating surpluses in the year of preparation. Consequently, the decrease of inputs did not occur in the first one year or two, for that required the functioning of a new type of price system and regulations, and the latter required a period of one or two years to become established. In 1981, complex efficiency was more favourable and the first results of shifting to the new path appeared." (p. 45) Unfortunately, the consolidation of this trend is not proven by subsequent time series.

In both chapters long discourses are devoted to structural changes as well as to labour productivity and in its context to the problems of the exploitation of capacities and external economic aspects. I would have preferred to read also about the role of the second(ary) economy as its inclusion into the computations would closely affect the idea about worktime inputs and labour productivity.

Chapter 3 provides an international background to the analysis. The development of labour productivity and of the efficiency of fixed assets (capital productivity) is reviewed in socialist countries between 1960 and 1980. A detailed

picture is given to the reader about the development of economic efficiency in the West European countries and in the United States in the 1970s and a few brief forecasts are presented for 1990. Two of the conclusions derived from this analysis are particularly worth of quoting. The first one concerns the study of the United States: "It is perhaps the most remarkable observation that *throughout the period under study, capital productivity increased or at worst it was maintained whereas* no decrease could be stated in any stage, not even in times of recession" (pp. 90–91) The second statement is as follows: "Comparative data of the advanced Western countries indicate that recession, the decrease or stagnation of production, are not necessarily accompanied by a decline in efficiency. In countries where recession is relieved by dismissals or by restricting the employment of new workforce, the growth of the productivity of labour, of capital productivity and of total economic efficiency as a combination of the two is apparent even in years of recession, only it is less dynamical than in other periods. I suppose that from our point of view the conclusion to be derived is not that unemployment should be endured for the sake of survival in hard economic times. This is obviously not a socialist way of solution, but there can be no doubt that a higher rate of growth of efficiency can be achieved with a suitable investment strategy, by carrying out investment projects faster, by enhancing their efficiency and by an intelligent and better-than-at-present combination of labour and capital inputs even when productivity cannot be increased at the old rate." (pp. 93–94)

As far as I am concerned, I should also infer that unemployment can be avoided, but fast structural transformations require a considerable readjustment of the workforce and the longer this is delayed the greater the loss it will inflict on us. This chapter also shows that the growth of productivity and efficiency equally slackened during the 1970s in the Western and, with some time lag, in the socialist countries. Though from this point of view the case of Hungary is not exceptional, a few differences should still be noted. International comparisons are quoted in the book later on, yet it would certainly have added to the value of this Chapter to present and analyse these comparative data in a systematic way.

In *Chapter 4* the changes of efficiency in the 1970s is analysed in the industry and especially in its main sectors as well as in the building industry and in the agriculture, with special regard to the study of capital intensity and structural changes. The following summary statement is made about the Hungarian industry: "... the introduction of the new economic mechanism, the changing of the system of regulators, profit-oriented incentives and a higher degree of enterprise autonomy have been beneficial for the whole industry although the degree of the favourable impact was different in the various industrial sectors. A process of differentiation took clear shape although it was balanced by a rather large number of state preferences already in the first half of the 1970s. The unfolding differentiation was followed not much later by a levelling of efficiency along with the development of a more and more intricate system of state subventions and levies." (p. 129)

I find the following evaluation of the whole of the period in question to be especially appropriate: "... during the seventies the trend line of efficiency showed a break and this break occured in almost every sector of the national economy. ... This change, however, ... does not show the time *when* the factors curbing the increase of efficiency *were generated* in the economy: it only shows the time *when* they *asserted themselves.* The two events, however, did not occur simultaneously in Hungary–like in the Western countries–but with a phase shift ... the economic leadership only permitted the workings of the first oil price shock to be felt in the production units of the Hungarian economy in the fifth five-year plan period (1976–1980), and this was in addition topped by the second oil price shock–the impacts of which were better controlled centrally–and so the change of the trend is understandable and justifiable". (p. 113)

It is noteworthy that the increase of the complex efficiency indicator between 1970 and 1981 was 51 percent in the industry while only 33.5 percent in the building industry, 26.1 in agriculture and forestry, and 25.2 percent in the productive infrastructure. A thorough analysis is given of the significant role played by the central

development programmes and the related and other structural changes. In this context data are quoted which the Central Statistical Office collects from enterprises on their strategic plans concerning the classification of their products according to the degree of competitiveness. These data regularly contradict other data and estimates collected from companies in an *anonymous* way and so I do not find them convincing enough. I am similarly reluctant to draw meaningful conclusions from data concerning the age of products. A new product is not necessarily a competitive product while there are products standing in the market for decades (e.g. the Lego toys since 1947) and their competitivity does not decrease.

The conclusions derived on the basis of the analyses also draw the contours for a future economic development strategy. I quote for example a statement about the sensitivity of industry to imports: "... in the decade of the seventies this area showed both justified and also excessive growth. The decade of the eighties must bring a new turn also in this respect. Certainly not the participation in the international division of labour needs to be reduced, on the contrary, the task is to develop a more advantageous structure of activities so as to promote our increased participation in the international division of labour. But it is one of the cardinal tasks to influence the import sensitivity of the whole economy in a manner to increase economic efficiency through the use of imports on enterprise, sectoral and national economic levels alike. The volume of imports of research intensive activities must be properly increased and, at the same time, we must get prepared for the substitution of the import of certain products, replacing them with domestic products in fields where economic efficiency so requires. (pp. 190–191)

The analysis of agricultural efficiency with the aid of gross and net indicators is very interesting. According to the international comparisons quoted, the declining trend of labour input and the rising trend of machine and other material inputs are worldwide tendencies but are supposed to result in bigger net outputs. These inputs and outputs do not show favourable proportions in the Hungarian agriculture. It follows that "the agriculture can maintain its present advantageous position in the national economy only if the efficiency of its work is increased under the conditions of a more rigorous regulation. The machinery and personnel conditions are equally available. The process can be supported by enhancing the role of complementary activities." (p. 213)

The analysis of the building industry states that "... the adverse conditions of demand and the changes in the structure of productions of demand and the changes in the structure of production and inputs of the building industry notwithstanding, building industrial enterprises did and do work with relatively favourable profitability. The decline of capital intensity was not felt in the enterprise results either". (p. 199) "... therefore a way of transmission through the system of regulators and prices should be found to let the organizations know the real degree of national economic efficiency they actually achieve. This apparently requires, beside increasing the normative power of regulators, also a correction of the price system." (p. 200)

In *Chapter 5* the changes of national economic efficiency are analysed on the basis of total input indicators computed with the aid of input-output tables. These indicators show the inputs emerging through the total process of production as expressed in the end products of a given sector. As I have explained elsewhere in more detail, these indicators are not actually sectoral ones but relate to groups of commodities and express, with different weighting, the combined efficiency of every sector. Evaluations of this kind are difficult to make because the corresponding reference data are available, as also in this case, only for a few years and so it is seldom possible to follow their changes continuously, at least in a more detailed breakdown. Aggregate indicators contain too many assumptions. Despite these reservations this Chapter is a good example showing how interesting information and conclusions can be drawn from this kind of analysis. For example the indicators of import material intensity show that the total import requirement of 100 forint of output for final use increased at current prices between 1970 and 1979 in the whole of the national economy from 19.4 to 25.3 forints. This growth was relatively

small in the industry (from 26.5 to 31.3 forints) while in agriculture (from 14.5 to 22.7) and in transport and telecommunication (from 11.3 to 18.8) it was extremely high. Within the industry the total import demand was the highest in the chemical industry: in 1979, the total import requirement of 100 forints of output for final use amounted to 45.8 forints. The same indicator was 16.9 in mining and in the electric power industry, 42.9 in metallurgy, 27.6 in the engineering industry, 23.9 in the building industry, 32.9 in the light industry and other branches, and 30.7 percent in the food industry. The total electric energy requirement was recorded to be the highest, beside the electric energy industry itself, in metallurgy, in the building material industry and in mining. In the closing part of this chapter an attempt is made at comparing the complex efficiency levels of the different sectors at computed world market prices. This shows extremely big differences in comparison with the domestic price level, first of all in favour of the food industry and agriculture; however, owing to methodological reservations it would be too early to arrive at any far-reaching conclusions from that.

The concluding chapter of the treatise deals with the social aspects of efficiency, namely, with four major problems: the workforce background, the demographic forecasts, the youth and the retired, as well as with the reserves of efficiency inherent in organization and attitude formation. Although only some special problems of the social aspects of efficiency are discussed in this chapter, it complements the analyses given in preceding parts and based more strictly on statistical data. The due requirement of statistical backing-up supports the authenticity of the analyses but, at the same time, this forces us to omit many important interrelations. It is striking for example also in the detailed computations of *Denison* that he cannot help treating 30 to 50 percent of the sources of growth as residual ones under the heading "advance in knowledge and other factors". This chapter makes up for much of one's want in this respect. Its conclusions (the need for a long-term approach, increasing receptivity to the new and the inclination to innovate, preparation for receiving and adopting new technology, learning how to respond faster, and, in the inretest of the aforesaid, the development of education and retraining) draw attention to matters that are absolutely essential, and offer important building stones to an economic policy concept aimed at enhanced efficiency.

The book of Mrs. Nyitrai is a significant contribution to the shaping of the Hungarian economic policy. With its comprehensive analysis of past experiences, its realistic and critical evaluation of the present situation and its conclusion revealing new interrelations it also sets the main direction of the way out of our current difficult situation.

Z. ROMÁN

CAVE, M.: *Computers and economic planning: the Soviet experience.* Cambridge University Press, Cambridge 1980. 224 p.

It is not usual that a treatise of high standards and showing a broad knowledge of the subject is published by a Western author about economic problem of the East European countries. Not all of the studies, however, may boast of the qualities of *Cave*'s book: an unbiassed manysided analysis of problems, objectivity and understanding of the real (and not the pseudo) problems. Although it is undoubtedly felt from the book that the author has only read and has not had personal experiences about the post-1973 developments, he nevertheless presents an approximately correct description of the present situation. This is especially remarkable if the difficult subject is taken into consideration, more exactly, that in the Soviet Union the efficiency of the automated management (planning) systems is far from being proportional to the quantity and length of the relevant literature.

The book of Cave is well edited and to the point. Through the theoretical and technical advancing of automated management system and the main fields where they are now functioning, it gives a good (and unbiassed) review of the contemporary Soviet management mechanism and of the so-called "authority" attitude, which is criticized also inside the Soviet Union.

Chapter 1 gives an excellent historical review.

The basic idea of automated management and planning systems was raised in the late fifties when cybernetics had ceased to be regarded a "bourgeois pseudo-science". The first beginnings of establishing a national network of computer centers also germinated at that time but they were not really viable because of the lack of the necessary technical background and of "official" attention.

The first ideas formulated by mathematician-economists were extremely broad-minded and ambitious and were intended to cover the whole of national-economic accounting, statistics, planning, material-technical supply, financial management and the system of transport management. As the author points out, all of these were in interaction with the ideas of the times about improving the economic mechanism, and it was still a strong illusion that computerization would at the same time enforce better management because its "cool rationality" would not tolerate any inefficient use of assets.

The first official resolution was taken in 1966; however, so many organizations were to be involved in its implementation that responsibility simply vanished instead of being divided. It is an appropriate observation of the author that when recentralization was started in 1969, a process also based on computerization, the first comprehensive "official" specification of the contemporary automated management system was construed, namely, the OGAS (the state-wide automated system for the collection, storage and processing of data for national-economic planning, management and accounting). This system already formulated the need for automated planning and control as a sub-system. The system was not introduced as has been intended in the course of the 9th five-year plan. This then seemed to be due to purely technical reasons (to the insufficiency of computers of the third generation).

At the same time, in 1973, a resolution was passed on the reorganization of industrial control and the unions (obedinenie) date back to this time too. Along with the unions also the regional-minded economists raised their voice and suggested to build up the automated systems on the lines of the regional principle. According to this proposition the higher authorities and the unions belonging to a given region were to use the same computer network. In the last resort the advocates of the regional approach did not score any considerable result.

Part 2 is the most outstanding chapter of the book from the theoretical point of view. Cave compares the possible theoretical approaches to the planning process and the actual practice adopted in the Soviet Union.

He distinguishes two basic theoretical approaches: the method based on the planning algorithm approach and the one relying on information theory. By the first approach the process of planning is formalized and substituted by a kind of an optimization problem. He lists here eg. the two-level planning of *Kornai–Lipták* or the SOFE (system of optimal functioning of the economy) drawn up in the Soviet Union. He claims that, since it is impossible to formulate a single explicit objection function, the process of planning is oversimplified by considering it an optimum problem.

Another approach concentrates on the information flow in the planning process and tries to find the characteristics of the efficient use of information. In the Soviet system of economic control and management and statistics, however, an extraordinary amount of information is flowing and the basic assumption of information theory, ie., that the user will receive only the information he actually needs, is not satisfied.

Concerning the Soviet routine, Cave refers to the two types of control as distinguished by Soviet authors. The "from the problem" model of control is focussed on the unit of production itself and derives the objectives of the management system basically from the real sphere.

According to the other approach called "from the photograph" the given management system must be accepted as a reflection of the functioning of the unit and investigation, ie., automation, must set out of it. Cave palpably illustrates the two approaches through the example of *gosplan.* *

*State Planning Committee *(Ed. note)*.

Subsequent to the comprehensive historical and theoretical grounds the four basic sub-systems of the automated management systems are presented "on the job". The ASPR (automated system of planning calculation) is employed by *gosplan*, ASU MTS (automated system of supply management) by *gossnab*,* the OSAU (branch automated management systems) by ministries and finally the ASU and the ASUP (automated systems of enterprise management) by enterprises. For each of the four sub-systems the original objectives and the special features of functioning are analysed and the "adjustment" of the objectives and the functional mechanisms to the institutions that provide the frameworks for the systems is suggestively presented.

The first working team was set up in 1966 to elaborate the ASPR which was intended to reform planning. Initially, the ASPR was supposed to be much more than it now is–more than the computer-algorythmization of certain plan calculations. The integrated planning system models are undoubtedly still recorded in the framework of the ASPR, however, these models are not constructed so as to form a consistent unit and they could neither substitute for nor alter the traditional process of planning.

Cave suggestively shows that today the painstaking elaboration of the "technical" details of partial systems is done instead of laying down the principles for the functioning of the complete system.

Cave correctly points out the role played by *gossnab* in the economy: in a system of directive planning where the centralized allocation of resources is typical, a second big power working beside the Planning Office cannot be but a general authority in charge of allocation. The overcentralization of the Soviet system of resource allocation began to abate by the late sixties when, firstly, the organization of *Gossnab* was decentralized and, secondly, they began to encourage the enterprises to establish long-term direct supply lines with each other.

From time to time these aspirations at decentralization gain or loose vigour and, as a reflexion of that, the ideas about the automated management systems (ASU MTS) also change.

The first draft of the automation of supply was elaborated in the early 1970s by TSEMI.* In 1973, however, Gossnab argued that it was more reasonable to advance an automated system under its own auspices and the previous research team was simply wound up. The fate of the mathematical model they had construed was thereafter unfathomable although some of its elements were surely used. Since more committees than concepts were born for the automation of supply, the most palpably formulated objective aimed at the standardization of products; however, in this field, too, a slowdown was observed.

In the rest of the chapter the author gives descriptions of some automated supply sub-systems (nonferrous metallurgy, etc.). However, from the whole chapter as well as from the chapter about *Gossnab* a description of the development of the second half of the 1970s is mostly missing.

Cave points out that theimportance of automation on the level of ministerial control cannot be understood without knowing the role of ministries in the Soviet economic management. The ministry is, namely, not merely an information filter between economic units and the highest level control authorities but it has a scope of authority itself.

Although at the beginning of elaborating the automation systems the ministry's role as a higher authority was presumed to be degraded into a technical role, this was *ab ovo* denied by several Soviet experts and the setting up of ASPR at *Gosplan* and of OASU at ministries actually did not bring about any change in the relations between these two authorities.

About 300 authorities of ministerial level exist in the Soviet Union with their respective branches (the regional subsystems are, naturally, included). In the first stage of elaborating the sectoral automated systems it was planned that over 200 systems would function in 1975–whereas not more than 198 were set up by

*State Committee for Material and Technical Supply (*Ed. note.*).

**Central Institute for Economic–Mathematical Studies of the Academy of Sciences of the USSR (*Ed. note*)

1977. The quality aspects of development are also quiestioned by many, claiming that nothing more happened but computations and construction of tables that used to be manual tasks were automated.

In the course of elaborating the sectoral automated management systems the simplification an uniformization of information systems took place by necessity, mainly upon the recommendation of TSEMI, and this was undoubtedly a big step towards rationalization. In the rest of the chapter an impressive description is given of the planning sub-systems which were elaborated in the framework of OASU (and which are partly functioning).

While the development and running of the automated systems discussed in the said chapters were easy to represent through the example of some organization (planning: *Gosplan*, supply: *Gossnab*, sectoral – any given ministry), the enterprise automated production management systems vary by enterprises and, therefore, it is extremely difficult to make general statements about them. On the other hand all the concrete examples differ from each other in one way or another.

Enterprise computerization was given some impetus only after the said Central Committee decree of 1966 and the automated production management systems actually began to work only in the 1970s. The guidelines specifying the principles of the production management systems (ASU ASUP) hoped to achieve the standardizing of systems (at least in a given branch). These guidelines provoked debates. Especially the lack of actual statements and of the systems approach were missed.

At the end of the chapters about both the sectoral and the enterprise automated systems, Cave presents the technique of computations to measure the effectiveness of the systems. He states that these computations are based on the traditional Soviet methodology of investment appraisal. He expresses his reservations in this respect (eg. interpretation of the recoupment period and its inverse in the case of automated systems).

The book by Cave is useful reading even for persons having insight in the system of Soviet automation systems because of its logic and clearcut structure and its correct evaluation supported by facts.

J. KIRÁLY

LIEBRENZ, M. L.: *Transfer of technology. US multinationals and Eastern Europe.* Praeger Publishers, New York 1982. 363 p.

The book tells us the story of eight different technology transfer projects by six US multinational companies to four Eastern European countries. The product line covered ranges from organic friction material for brakes and all-steel radial tires through construction machines and farm implements to electronic components such as pressure transmitters and semiconductors. The MNC's dealt with are: Clark Equipment, International Harvester (IH), Honeywell, Westinghouse Electric, General Tire (GT) and Bendix, all with US headquarters; the Eastern-European hostos: Poland, Romania, Hungary and Yugoslavia. Time frame is the early seventies and onwards.

We have thus eight parallel stories, all arranged according to a standard pattern that makes comparison easier. The whole treatment lies somewhere in between in-depth qualitative analyses of one special case (case study) and extensive, but merely quantitative statistical works: a very desirable blend indeed. The exposition is more descriptive than analytical, with many interesting details. No aspect of a technology transfer project is left out, be it financial, technical or organizational, making the whole presentation truly interdisciplinary in its nature. Data collection followed the double path of sending out questionnaires and conducting personal interviews with top MNC officials.

Technology transfer is defined as a type of linkage which involves a corporations technology and/or managerial skills in return for payment from the foreign party. Technology transfer contracts are much more complex than simple licensing arrangements, involving training, equipment selection or turn-key commitments as MNC responsibilities but not expected to evolve into direct investment or joint venture.

Although numerous arguments do exist against the transfer of US technology, the most

important ones being exportation of jobs, creation of competition, threat to national security or unsatisfactory level of control over the host company, such transfers are steadily gaining ground. They serve mainly as a substitute for equity type involvements in cases of capital shortage or high political risk of expropriation. In Eastern Europe (the term stands here for CMEA+Yugoslavia–the Soviet Union) it is sometimes the only viable alternative, these countries usually not permitting equity type involvement for capitalist firms (Romania and Yugoslavia were the only exceptions known to the author; since then new regulations apply to Hungary and Poland).

And now to the actual experiences. What do the two sides seek in the deal and to what extent are expectations fulfilled?

The US based MNC's foremost aim in the cases under discussion was entry to an otherwise closed market. The contract meant for them immediate sales in components (Poland started production with 80 percent IH, Romania with 90 percent Clark components) and finished products plus the further possibilities created indirectly through getting a toehold in the market, making their company's name known. Direct sales objectives were generally met, overall market penetration is somewhat disappointing, however. As yet, few additional agreements were concluded, lucrative contracts went to the competitor. Bumar (Poland) chose in a recent arrangement IH, instead of its original partner Clark, whereas Unitra (also Poland) chose RCA and Corning Glass, instead of Westinghouse. Ironically: Clark's technology in axles was used in Poland partly to assemble its competitor's product.

Another objective envisaged by several US firms was to acquire–without capital involvement–new, possibly cheap product sources from which they could better supply the West-European or Middle-East market. This was a decisive aspect in Clark's and IH's motivation. (Clark was just thinking about investing several million dollars into the expansion of its transmission plant when the Polish offer came). The ensuing buy-back or counterpurchase arrangements matched perfectly the Eastern European contries' striving for hard currency (in case of RÁBA (Hungary) IH agreed not only to buy back its own models, but also, as a counterproduct, some of RÁBA's Hungarian designed 30 ton axles). Clark was pleased with the results ("excellent" quality, good prices), IH had some problems however: its Polish partners were seriously behind production schedules ("while they had talked of thousands, they were producing hundreds"), and the IH axles produced by RÁBA (unlike the Hungarian-designed ones, which were of American quality) did not meet specifications when they came first off the line. The potential for exchange between the two Clark (Polish and Romanian) and two International Harvester (Polish and Hungarian) plants did not materialize because of "nationalistic" tendencies–as the authors says–burdening intre-CMEA trade.

Financial benefit is another MNC objective, ranking usually third-to-fourth, but first with Westinghouse, a semiconductor producer who *has* to sell its technology in order to recover the large capital outlays in equipment and R+D, indispensible in its product line. Techonology transfer, being pure profits, makes up for 1/5 of Westinghouse's total earnings, although its share in corporate sales is a mere 0.5 percent. Unexpected costs as extra training, travelling or testing may erase part of this profit, as was the case with IH in Poland.

Joint development is also a possibility with IH establishing a joint Polish-US design office for the development of a new generation of bulldozer and engine, and Bumar redesigning some Clark axle models. Thus the reverse flow of technology–as e.g. the conversion of assemblies to the metric system–remains another alternative. This redesign business created a most serious dispute between the parties–threatening with arbitration–when Bumar wanted to pay on the new product (sold in large quantities in the USSR) a 0.5 percent royalty instead of Clark's request of 3 percent. They disagreed as to the originality of the Bumar design. An agreement was reached in the end at 1.5 percent.

GT, acting in Romania, had some special aims not encountered with the other firms. First: building a big plant, with 1 million tire/year capacity, it tried to add to its previous know-how of transferring tire producing technology, and

second: it wanted to obtain from Romania some oil-related raw materials. This latter aim he failed to accomplish however, as Romania sold these materials at a 30 percent premium on the spot market, although GT had previously acquired a right of first-choice purchaser.

The East-European firms' main purpose is to update their existing technologies (they are usually keen on getting the latest possible designs or formulas) and to add marketable products to their product line.

Negotiation usually lasts one-two years. In Yugoslavia one can negotiate directly with the producer, in Romania there are four levels in the negotiating hierarchy. East-Europeans are hard negotiators, hold firmly to their end of the bargain. Watch out during negotiations, the author warns, if you do not want portions of the contract be lost or varied, items from the price list cancelled. Responsibilities of both parties should be carefully specified. The wording of a contract is much more important in Eastern-Europe as in other parts of the world. The contract is viewed as "the law". Once concluded, it is followed to the letter. Competition from other Western firms can influence contract terms (press down prices, impose buy-back provisions, induce to cede one's latest developments in technology). Personal contacts are a great asset in negotiations, which concentrate more on the people involved, as the company in whose name they act.

From a purely technical point of view, the more familiar the product, the easier the transfer. A design error of Honeywell's latest class 41 transmitter appeared only at MERA, the Polish host company and caused delays. MNC's are pressed, however, for the latest in technology and the best in machinery ("the gold-plated factory concept"). High technology transfers (as Honeywell's electronic pressure transmitters to MERA or Westinghouse's semiconductors to Unitra) fared better than average although they posed some security and competition problems. To solve the first, Honeywell withheld the most intricate part of the technology (the sensor) for five years, the information being transferred for this period to a neutral Swiss bank. Freezing technology some years before the transfer is made is used by Westinghouse as a measure against competition. Honeywell maintains on the other hand that there is no risk in selling its proprietary know-how to an "unknown" Polish firm (as opposed to a leading Western-European one).

Larger projects (like GT's tire factory) tend to be less successful than smaller ones (like Bendix's friction material in Yugoslavia), but in some instances, the more critical a project looks like *ex ante*, the more successful it turns out to be *ex post*, as a result of better preparation. A good example is Westinghouse's extremely complex semi-conductor project in Poland, where a computer program scrutinized every detailed step of the 32-months long operation. A special code number was given each item down to wastebaskets. Charts and signs with buzzers, lights and clocks were installed throughout the plant to secure high visibility without paperwork. This systematic control over each step of the transfer helped to prevent confusion and waste. A negative example is that of IH in Hungary, where difficulties could have been avoided, had they not been underestimated beforehand.

Turn-key projects pose additional problems if the MNC assumes the role of prime contractor. The host will in this case not agree to separate equipment prices from the fee for the know-how and because of delays in delivery payments can soar, warranties expire. It is felt better to have a distinct equipment supplier as a buffer company.

Training experiences are mixed. MNC's found some outstanding engineers and well-trained, capable workers in Eastern Europe. Education levels were actually higher in most cases than would be back in the US. Dedication and flexibility of local people were crucial for some projects' success. Honeywell found MERA workers intelligent people with an agressive, determined approach to the project. No training problems were encountered with the two high-tech transfers. With the remaining ones some difficulties showed up, however. Special manufacturing and management skills were lacking, quality control procedures poor, workers not accustomed to adhere to strict tolerance levels, or to follow procedures exactly. Previous experience proved to be more of a liability than an asset. RÁBA's workers in Hungary felt they knew how to make axles as they did them for years. So IH

instructions were ignored. Inadequate incentives resulted in worker indifference, absenteism. Shunning responsibility was another problem. Both workers and supervisors were afraid of making a decision. "This was apparently due to the fact that if mistakes were made, punishment was forthcoming. Workers did not seem to care as long as they did not have to make any decisions that could lead to mistakes." "Supervision appeared limited to giving orders and such orders were usually followed, often regardless of the circumstances or in the face of apparent problems". In this–self-efficiency–respect RÁBA workers fared somewhat better than their Polish or Romanian counterparts.

Maintaining a high level of leverage by both parties throughout implementation is essential for success. As one company put it, the arrangement should be structured in such a way that you can go away without loosing much any time you wish. A traditional means of MNC leverage is granting trademark, which implies continuous inspection and quality control. Trademark on a component–as opposed to a complete product- is not very instrumental however, because of minimal visibility. Another way of securing MNC leverage is to withhold part of the technology until all requirements are met. Technology updates, the prospect of extension, buy-back and component sales all favour the MNC's standing. The host party's position is secured by proper scheduling of payments, with the right to withhold some portion (usually 10 percent) of the amount due until the final protocol is accepted. Good rapport between the partners, dedication to the project from both sides is a leverage in itself (Bendix, Clark). GT felt a leverage bias in its project as delays in acceptance favoured the Romanians (they could produce without paying royalty, more updates went to them with time progressing, and there was the wear and tear of the equipment). Unfortunately such a delay actually did happen as the test vehicle went off the road, by accident destroying several months of test results.

Payments, prices is an area where information is sometimes hard to get (even in retrospect). From IH's Polish contract we only learn that the two initial offers were $ 10 m and $ 100 m and a compromise was established somewhere in between. Payments are usually divided into an initial disclosure fee (due upon the transfer of the documentation) and annual royalty payments for the updates. Royalty is usually stipulated as a lump-sum annual fee, but Clark and Bendix used a royalty per item produced (5 percent of sales price with Clark). This latter solution is more demanding in terms of production auditing. In Bendix's case, an outside check figure on Vartek's (the partner) friction material sales was given, the only user of the product being the Yugoslav automobile industry with production figures ready to access. Royalty fees usually include a built-in escalation factor accounting for inflation. Constant fees are generally detrimental to the seller, although in Honeywell's case constant subassembly prices reaped windfall profits as prices went down. With buy-back arrangements payment schedules may be tied to the host company's delivery. Clark agreed e.g. to take from Bumar in royalty no more than 50 percent of the production bought back, thus protecting the Poles from any hard currency problem. No payment problems were encountered in any of the 8 projects thus far.

It is hard to draw a final conclusion, partly since all of the contracts dealt with were ongoing at the time of writing the monograph. From the single company projects which do not allow direct comparison those of Honeywell, Westinghouse and Bendix seem to be more successful, GT's less. Clark was more pleased with his Romanian project than the Polish one, IH with the Polish than the Hungarian one. All participating MNC's expressed an interest in similar technology transfer arrangements, initial birth pains notwithstanding.

The book is really worth reading. It contains useful material both for the theoretician interested in real-life workings of this type of contract and the practitioner who wants to learn from the mistakes of the others. I only wish we had similar books in Hungarian Polish or Romanian, telling the other part of the story, presenting East-European manager's views on these same technology transfers.

A. SZEGŐ

KUNVÁRI, Á.: *A gazdaságfejlesztés irányításának alapkérdései. A gazdálkodási egyensúly feltételeiről* (Basic questions of the control of economic development. On the conditions of balanced economic management). Közgazdasági és Jogi Könyvkiadó, Budapest 1983. 224 p.

Models of planned economy so far used in Hungary are discussed by the author as stages in a long historical learning process. In this train of thoughts the old way of "direct control of production technical management" as well as the current "control based on financial regulation" are necessary steps in the development of socialist economic contról and management. In these stages the socialist economy functioned in specific and also historically determined ways, reflecting the given conditions and the actual tasks, and so were organized the relations of interests between economic control and management based on the public ownership of the means of production and on socialist approach *vis à vis:* the personal-and-family management possessing the labour power. It is understandable if the new postulates emerging in the stage of transition to the intensive stage of economic development raise the issue of establishing still another and a more advanced system of economic control and management and of reconciliating interests. This next stage of development is named by the author a *model of organic economic management.*

The author assumes the model to be a dynamical system of relations widely applying self-organizing and self-developing mechanisms, where the balance of economic management can be assured not only globally but also partially, and for this very reason planned development is more effectively asserted. The main characteristics of this system which are themselves in interaction can be summarized as follows:

– Amplifying of the indirect forces of control (consciously built market and normatives of social behaviour); introducing of interactions of management with the direct forces (power, public interest, respect, information); national economic planning, well organized and expedient in itself, integrated with society.

– A set of conditions of economic efficiency whereby economic equilibrium is continuously enforced and reproduced (valuation of resources; requirements of returns and yields, forming of funds for expansion and replacement).

– A system of organization where economic control and management has close institutional background relations with society; an adequate level of transmission is created between economic management on the macro and enterprise levels; an organization of innovation functioning as a complex system of production technological development.

– A balanced state of economic development where expectations and working efforts are in equilibrium: labour incomes depend on results and on the degree of preliminary preparatory and development activities; demand for production and investment are controlled by severe efficiency considerations; national economic plans are realistic.

– A state of intensive economic equilibrium involving investment of resources to promote efficiency as well as substitution of resources to promote efficiency as well as substitution of resources, where resources for non-productive purposes are steadily growing and the standard of living is rising.

– Demand and liquidity are in accordance with public expectations towards the efficiency of the use of resources.

– Effectively stimulating and stabilizing mechanisms of economic and social control; asserting of the efficiency of live labour in the set of conditions of economic efficiency and informing the return requirements; asserting of a consistently normative regulation of returns of assets in harmony with the funds required for expansion as well as with the opportunities of returns; balanced formation of social and enterprise funds, raising of credits in agreement with the opportunities of returns.

The structure of the book is a good illustration of the line of reasoning of the author setting out from certain general theoretical interrelations and from the clarification of certain notions, relying on conclusions that can be derived from the practice of the Hungarian economy as well as on his knowledge of the problems and dilemmas of development; thus arriving at formulating his ideas about the *model of organic economic management.*

It is a major conclusion of the author that during the *transition* from the extensive to the intensive stage of development not a changing blend of extensive and intensive economic management is required, but a special economic management and balance of economic management adjusted to the given conditions and pushing them towards intensive economic development. This is necessary, besides the need to eliminate the structural tensions hindering effective economic management which are scrutinized in the book, also for solving the big problem of double-based socialist economic management, ie., relying on large-scale and small-scale establishments, in harmony with the attained degree of development, for laying the foundations for a long-range solution: to establish a durable balance of interests between economic control and personal-and-family management which has the workforce.

It is characteristic of the conditions of production today that expectations are formed in both enterprise management and in personal-and-family management irrespectively of working efforts and their effectiveness and not in interaction therewith. It is therefore imperative to build up the proper elements of advanced management equilibrium including the *set of conditions of economic efficiency* whereby the conditions of global management equilibrium are mediated as a scale of values and translated into an integral part of both partial balance on the enterprise level and of the balance of personal-and-family management alike. This requires inherent harmony and balanced state from the set of conditions of economic efficiency and a high degree of unambiguity which must not be expressed in a complicated way. It is an old problem of the socialist system of economic control to create the above, in the last resort the rational regulation of expectations towards returns of costs and proceeds, considering also relations of interests.

The author points out that during the past 8–10 years the set of conditions of economic efficiency underwent robust development in Hungary; however, the inconsistencies of economic efficiency which thwart development have not yet been eliminated. It is a special problem, and in view of the experience of the advanced industrial countries it is intolerable, that in this country profitability is often marred by the rising technical and technological standards and that, as a rule, the obsolete production machineries are the most profitable ones, at least in cases when their prices are formed by an internal price mechanism. In this context it is a very important factor that in Hungary, production equipment is very expensive in comparison with wage costs. It is an interesting data that in the most advanced countries over ten times more instruments and machines can be bought for the costs of one hour of work than in Hungary. This difference is also due to the fact that in the most advanced industrial countries the said technical equipment are turned out with extremely high productivity. However, it must not be neglected that in those countries the level of nominal wages is artificially increased and at the same time the price of capital goods is relatively decreased by heavy taxes on consumer goods and by substantial direct or indirect subventioning of the productive sector. The already rapid uprating of human and professional factors is thus also furthered by national economic policy instruments through this two-level system of prices.

In Hungary, the situation is the reverse: even the inputs concerning the actual and achieved living standards are only partly present in the costs of live labour and also the two-level system of prices is reversed. Thereby the scale of values is necessarily distorted and, at the same time, inflation is reproduced, and that in its worst version, that fails to give any encouragement to resolving the contradictions causing inflation.

The author assumes that the inflationary tendencies originating from the primitive and perplexing valuation of resources exist in present-day Hungarian economy because the expectations towards new fixed assets and investments with respect to asset-proportional returns of costs and efficiency are exaggerated, whereas the costs of investment projects are a secondary issue. This way the unit investment costs are surging and cause the general price level to increase with a lag of three to five years.

Following the elaboration of all these lessons the author presents in a fairly detailed way, or perhaps too minutely considering the theoretical nature of the treatise, the individual elements of

a set of conditions of economic efficiency which he judges to be suitable and helpful for the purpose of transition to an advanced and balanced economic management.

In the author's opinion, focussing on profitability with respect to assets proved to be ineffective in the practice of the past decade. This also proves that under socialist conditions, the efficiency of live labour provides the basis for the evaluation of resources. This, however, is only possible when all the normalized costs of live labour such as social housing supply or the costs of general and professional education too, are perceptible in the production inputs–and not necessarily wage-proportionally as for example social benefits are more expedient to be reckoned according to employment figures; staff replacement, ie., the employment of new workforce could be connected with the regulation of the financial resources of investment.

Considering that in sectors with longer times of depreciation because of the slower rate of return of capital, the possibility of increasing the efficiency is limited, the author supposes that it is worthwhile to think over the linking of return requirements of fixed assets to depreciation.

He also finds that it would be reasonable to raise requirements of returns and amortization also towards the inputs of technical development and management development.

He assumes it to be obvious to realise the "neutral" tax burdens through taxes on consumer goods in order to increase the weight of live labour in costs; it may also be necessary to tax personal-and-family wealth that is far in excess of the average to balance tensions in wealth.

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In *Chapter I* of the book the author correctly points to the following, actually global, problem: "Theories and actual experience practically reflect doubled values and often run along different paths of thought. Theory is to some degree isolated... it does not offer enough knowledge to provide the efforts taken in practice for improving the control of economic development with objective and scientific qualities." Árpád *Kunvári,* venturing, and successfully, an extremely significant task, tried to offer his constructive contribution to the filling up of this gap. Setting out from well-defined concepts and adopting historical approach and dialectic methods he was able to find the right place of a number of economic interrelations and thus to pave the way for solving more concrete and practical tasks.

GY. ÚJHELYI

BOOKS RECEIVED*

BALÁZS, J.: Die Türkei. Das Phänomen des abhängigen Kapitalismus. Akadémiai Kiadó, Budapest 1984. 262 p.

BÉLYÁCZ, I.: Az állóeszköz-állomány korszerűsítési folyamata (Modernizing the fixed assets in Hungary). Akadémiai Kiadó, Budapest 1983. 108 p.

BENGTSSON, E.–FRIDERIKSEN, D.: Fire perspektiver på Sovjetunionens udenrigspolitik. Sydjysk Universitetsforlag, Esbjerg 1984. 77 p.

ESZE, ZS.: A termelés túlfűtése (The overheated economy). MTA Közgazdaságtudományi Intézet, Budapest 1983. 88 p.

FÖLDES, K.: Szocialista gazdaság a változások korában (The changing socialist economy). Kossuth Könyvkiadó, Budapest 1983. 301 p.

FORGÁCS, T.: Kereskedelem a szocialista gazdaságban: elmélet és gyakorlat (Commerce in the socialist economy: theory and practice). Közgazdasági és Jogi Könyvkiadó, Budapest 1983. 802 p.

KORNAI, J.: Ellentmondások és dilemmák (Contradictions and dilemmas) Magvető Könyvkiadó, Budapest 1983. 311 p.

KOVÁCS, G.: Globális problémák – hazai perspektívák (World-wide problems–perspectives for Hungary). Kossuth Könyvkiadó, Budapest 1983. 97 p.

KÖVES, P.: Index theory and economic reality. Akadémiai Kiadó, Budapest 1983. 312 p.

KRÜSSELBERG, H. G.: Vermögen im Systemvergleich. Gustav Fischer Verlag, Stuttgart 1984. 269 p.

LŐRINCNÉ ISTVÁNFFY, H.: A nemzetközi kölcsöntőke-áramlás és a hitelpiacok (International flow of loan-capital and the credit markets). Közgazdasági és Jogi Könyvkiadó, Budapest 1983. 366 p.

NYITRAI, F.: Népgazdasági hatékonyság és tartalékai (Reserves for increasing effective productivity of the Hungarian economy). Kossuth Könyvkiadó, Budapest 1983. 296 p.**

ROUSSEAS, S.: The political economy on Reaganomics. A critique. M. E. Sharpe, Inc. Armonk 1982. 143 p.

ROUSSOPOULOS, A.: The issue of production paper currency and the abolition of personal income taxation. Emporion, Amsterdam 1983. 64 p.

TÖRZSÖK, É.: Exporthatékonyság és értékesítési utak (Export efficiency and the paths of sales). Közgazdasági és Jogi Könyvkiadó, Budapest 1983. 284 p.

WEIL, G.: Exchange-rate regime selection in theory and practice. Monograph Series in Finance and Economics. Monograph 1983–2. New York University. 75 p.

WILCZYNSKI, J.: Comparative industrial relations. Macmillan Press, London 1983. 256 p.

*We acknowledge the receipt of the enlisted books. No obligation to review them is involved.

**Reviewed in this issue.

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TO BE PUBLISHED IN OUR NEXT ISSUE

K. FALUS-SZIKRA: Distribution According to Work and the Reform in Hungary
I. HAGELMAYER: Concept of the State Budget for the New Phase in Hungary
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