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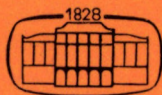
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DISTRIBUTION ACCORDING TO WORK AND THE REFORM IN HUNGARY

K. FALUS-SZIKRA

Wages in Hungary do not cover – in a considerable part of cases – the reproduction cost of labour power, not even if social benefits are included. The special needs of those performing especially qualified intellectual work are not expressed by wage differentials. The two types of wage differentiation – according to tasks or jobs and according to performance between those in the same job – are equally indispensable. Inadequate wage differentials among occupations and jobs lead to counter-selection. Wage has to conform first of all to the requirements raised by the task and only in the framework of these requirements to performance. The weakness of wage differentiation by jobs or tasks also puts a brake on differentiation by performance.

The most direct obstacle of stimulating wage payment in Hungary is at present the central control of wages. Progress towards easing the central wage control assumes that in enterprises a power restricting and preventing the outflow of wages without cover will come about. For this it is also necessary to make changes in the situation and interests of enterprise management. The situation must end where managers behave in wage questions rather as trade union officials and not as representatives of enterprise interest, of management. Executives must become much more interested in enterprise profit and in augmenting the wealth of the enterprise than is the case at present. For this the economic and the socio-political mechanisms have to be further developed in parallel.

The preparatory works aimed at further development of the Hungarian economic reform brought a number of theoretical problems to the surface. Such are the questions of distribution and distribution relations. Among other things the question was raised whether distribution according to work – which originally appeared in socialist economic theory as the distribution principle of an imaginary society without commodity relations – can be implemented in a commodity producing society, whether it can at all come into force under the current conditions prevailing in Hungary [1] [5].

Before answering the question it is expedient to make a distinction between two interpretations – a narrower and a wider one – of the concept of distribution according to work. In the narrower sense the meaning of distribution according to work is that in a socialist community the only source of personal income is labour, the incomes arising from the private ownership of the means of production cease to exist. Undoubtedly, this can and had in fact been realized in the “existing form of socialism”. Even though some unearned incomes may occur in the socialist countries, – among these some which are connected with the ownership of means of production, – their share is extraordinary

small, not at all comparable to the incomes deriving from capital in the capitalist countries.

A much larger number of theoretical questions arises in connection with the other; wider, namely, the classical interpretation of distribution according to work. This broader interpretation also implies that the *proportions* of incomes earned by work adjust themselves to the *proportions* of accomplished work. It goes without saying that this cannot be realized in the way Marx outlined it in the "Critique of the Gotha Programme": "... the individual producer receives back from society — after the deductions have been made — exactly what he gives to it." [6] On the one hand concrete works cannot be directly compared, no yardstick is existing for such comparison. Consequently, the contribution of the individual worker to the gross social product cannot be determined. Furthermore, under circumstances where the labour force is not centrally "allocated" among the various fields of activity, but everyone is more or less free to select his occupation and workplace, the labour-orienting, allocating effect of wages is needed as well in order to achieve that the distribution of the labour force among the different fields be in harmony with the demand of society. This, in turn, means that even if the proportions of work performance could be measured somehow, the proportions of wages would not coincide with them.

Factors shaping the remuneration of labour

The relative wages, i.e., the amounts of earnings as compared to one another of the various worker categories are formed on the one hand by such factors as the ability and qualification needed for performing the work, physical difficulty of the work, the spiritual and nervous stress caused by it, and, on the other hand, by the relation between demand for and supply of the type of labour in question. The hierarchy of wages, at the same time, cannot be explained by exact quantitative laws and the *degree* of the differences is not based on any quantifiable relationship. Only practical experience, among other things the signals of the labour market can give some orientation on the development of relative wages. What we have been saying in the foregoing is not a particularity of the socialist system, all of it also applies to the relations of the capitalist economy. The relative proportions of wages are determined by similar circumstances in both systems. As far as payment for the work performed by workers and other employees is considered, something like "distribution according to work" can be detected also in the capitalist wage system.*

The relative proportions of wages, or, rather the wage scales in the socialist and the

*Linking the individual wage to performance is a demonstration of this principle. In accordance with the performance principle of bourgeois economic theory, the individual is entitled to an income which is proportional to his contribution; equal performances have to be equally paid and different ones according to the proportion between them.

capitalist countries markedly differ from one another; the scale in the socialist countries, is, in several dimensions, narrower and more compressed.* In these countries the difference between certain levels of leaders, or between leaders and subordinates, or, respectively, between people with higher and lower qualification, is much less. This is widely known to a degree that it does not even need be proven. This more compressed character of the socialist countries' wage system may be ascribed to more than one causes. Quite obviously a part is played in it by the fact that the state takes over a very large proportion of the education costs (this decreases the differences according to qualification), and by the spreading of the idea of human equality which may also have such an effect. But the deepest-lying cause which follows from the essence of the system is by all means that, owing to the ceasing or at least decisive decline of the private ownership of the means of production, *personal income in the socialist society only serves for one purpose, namely, for personal consumption, i.e., for covering personal needs*. Accordingly, the wages of even the highest earning strata must not very much exceed the sum which can — under the given circumstances — rationally be used for personal or family consumption or investments serving directly for this purpose. The wages of the great masses cannot, even under capitalist circumstances, be more than the amount that can be spent on covering their personal needs. Workers cannot accumulate any significant capital or other source of income from their wages. For a certain minority — primarily those in senior leading position and the highly qualified professionals — this possibility is open. Some of them, for instance, managers who started their career as employees become, after a certain period of time, independent entrepreneurs, i.e., owners of capital. (At the same time a part of the entrepreneurs become managers.) The structure of wages in the socialist countries does not make such things possible. If only because of this, the range of wages is narrower, distances between the extremes are much smaller than in the capitalist countries.

The basic function of wages is to cover the costs of reproducing the labour power, to provide for the livelihood of those employed as workers and other employees and of their family members. In Hungary, however, *the special situation has emerged that — in a significant number of cases — wages, even together with social benefits, do not cover the reproduction costs of labour*. Often the wages (earned either in the state sector or in cooperatives) are not sufficient to satisfy the socially acknowledged needs or generally accepted demands. In order to be able to satisfy the needs relating to the reproduction of their labour power — and here we do not mean individual or subjective demands but only those socially acknowledged, — a considerable part of the working people have to undertake various complementary or subsidiary activities beyond their main job, or, are forced to acquire some kind of extra income connected with their main job (tips, gifts or

*This does not apply to every dimension. For instance in the sphere of physical (manual) workers the wage differentials are greater than in several capitalist countries.

illicit grants, bribes).^{*} No doubt, the most significant need that lies far beyond the possibilities allowed by wages or salaries, is housing. Wages include, by and large, only a sum which is enough to rent a flat from the state; at the same time only a very small — and even decreasing — number of individuals or families can get tenement dwellings in Hungary. The majority can acquire for themselves appropriate dwellings only at prices which are completely detached from the level of wages and which presuppose quite another sphere of material possibilities, mostly independent from their own work, some family support, inheritance, etc. This is perhaps the most serious anomaly in the Hungarian system of distribution which in itself calls for a reform of prices and wages! (Even if, for the time being, this is not possible.)

But it is not only housing that grows beyond the limits of wages. In Hungary today there are approximately 1,300,000 personally owned passenger cars.^{**} This achievement of civilization has spread into the everyday life of those living on wages and salaries. The owners use their cars regularly — if not every day, yet on week-ends or on occasions of family programs. As a consequence, the cost of purchasing and maintaining a car has become part of the reproduction costs of their labour power. Including depreciation, the cost of running a car today amounts to 3–4 thousand Forints per month.^{***} No serious calculation is needed to prove that without extra income, merely from their wage earnings, very few families could afford it.

It is an elementary theorem of political economy that the reproduction costs of various types of labour differ from one another and this difference must be expressed in the relative proportions of wages.^{****}

If a global study finds no correlation between the wage levels and the reproduction costs of the workforce, this applies even more to a breakdown by strata. The egalitarian scientific approach which mechanically transfers the concept of human and social equality (equal rights of citizens) to the sphere of economy, does not recognize the diversity of needs of the various categories of workers. Also the formulation usually found in textbooks is telling in this respect. It sounds somehow like that it should be made possible that the individual strata and groups of workers can "satisfy their material needs on a higher level." And we, as a rule, do not dare to add that the needs themselves differ, they may be of different magnitude with the various groups of workers. It is customary to justify exclusively the higher wages paid for heavy manual labour by their

^{*}It may, of course, occur that the extra work or the unofficial income connected with the main job serve for covering demands which must be considered a luxury at the current level of development. This is, however, not characteristic: in an overwhelming majority of the cases the question is to satisfy really basic needs and justifiable demands. Surely, by all means, this is the starting point. True, once started, it is not easy to stop on this way.

^{**}For the sake of comparison: The population of Hungary totals 10.7 million. (Ed. note)

^{***}For comparison: In Hungary the average earning of those living on wages and salaries is about 5 thousand Ft per month. (Ed. note)

^{****}In a part of the economically advanced countries — e.g. in Austria, the neighbour country of Hungary, — subsistence levels are calculated separately for particular categories of working people and these constitute the bottom limit of wages by category.

higher needs of food and calories. We usually leave unmentioned the *specific needs of those performing highly qualified, intricate mental work* (in respect of flat, cultural goods, services, etc.) and, what is the greater trouble, *these find no expression in the real proportion of wages and salaries either.*

It also belongs to the sphere of questions we are dealing with that the requirement is often voiced in connection with relative wages that they should be adjusted to performance and not to the scope or level of activities. There are many in Hungary who say yes to the increasing differentiation of wages according to performance within a given scope of activity but reject to increase the wage differentials in accordance with the scope of activity or the job held. This opposition is, however, unacceptable. Both types of wage differentials – the one between the scopes of activity and the other in accordance with performance in the same scope of activity – are equally indispensable, both of them have their own function. The differences between earnings in relation to tasks or the scopes of activity must play a decisive role in the distribution of the working potential, talents, faculties available to society among the various professions and fields of activity. "On the contrary, the aim of material stimulation in the long run is to control the selection, orienting the persons most suited for such work towards the jobs and professions requiring special talents and qualification. The interest of society is that the most gifted children should become engineers, professors, researchers, etc." [9]. Inappropriate relative wage proportions lead to counterselection among professions. Most of the talented young people having thus a broader range of choice will choose careers promising higher earnings, even if these will not render it truly possible to utilize their faculties. On the contrary, to the professions requiring excellent mental faculties but offering lower earnings, necessarily a lot of persons with medium or little talent and lower qualification will find their way. (In Hungary this can be demonstrated by the low score numbers achieved at entrance examinations by students admitted to the technical universities and other institutes of higher education or by the number of people employed in education without proper qualification.) In addition, in these jobs the unfavourable selection – owing to discontent and the material coercion to undertake extra work – leads to poor performance, even as compared to faculties, and to holding back performance.

On the basis of what has been said in the foregoing, one cannot share the otherwise similarly very widespread opinion that it is *ab ovo* inexpedient to raise the wages of entire strata or of whole categories of workers, since no substantial positive effect can be expected from it. True, under the present conditions there is hardly any possibility to do so, yet it is unnecessary to forge an ideology out of an emerging situation. *From a substantial improvement in the material circumstances of whole strata an increased attractiveness of the occupation and, thereby, alleviation of incidental unemployment, a better selection of manpower and the possibility of higher performance may be expected.* This, of course, does not mean that in such cases everyone has to receive uniform wage increase; on the contrary, it is necessary to differentiate. But it must be seen that in the case when the wage level of entire strata is seriously lagging behind, the higher

remuneration of those showing outstanding performance does not help too much and will not result in the better work of all pedagogues, engineers, etc.*

What should the wages be adjusted to: the task or the performance?

The relatively low remuneration of professions requiring higher qualification and the fact that the recognition of (material and non-material) efforts to acquire higher qualification is not expressed in wages puts a brake on the endeavours of young people coming from social layers in poor material conditions and having less intellectual demand for the continuation of their studies. (This appears mainly among the sons – rather than the daughters – of manual workers.) Hereby not only the basis wherefrom replacement may come for the professions but, followingly, also the possibility of selection grows narrower, and social mobility is weakened, too.

Wages have to be adjusted first of all to the requirements raised by the tasks of the job and only within the framework of the given requirements to performance. For an average performance of higher requirements a higher wage is due than for an average performance of lower requirements. A constructing engineer with average performance must, under any conditions, earn more than a skilled worker performing on average level, or in most cases even more than the latter in the case of eminent performance. *Basically, it is not wages that must be adjusted to performance but performance has to comply with the wages expressing the requirements implied by the tasks.* We may seem to believe that many problems which demand rather the assertion of performance requirements needed to fulfil the task could be solved through the differentiation of wages. In the case of inadequate performance the solution is not necessarily a correspondingly low wage level.** Half performance is always a loss for the enterprise even for half wage; but the more demanding the work, the more the loss will be. An ill-suited engineer or incompetent leader may cause damages which cannot be compensated by paying however low wages or salaries. If, on the other side, wages do not conform with requirements – for being comparatively low – then, sooner or later also requirements will diminish. The final result

*Those who are protesting against raising the salaries of whole strata refer to lessons of examples like the adjustments of the pedagogues' salaries in the past which, despite their considerable degree, did not entail sizeable improvement in the level of education. The example is, however, not convincing. Namely, these adjustments have only mitigated the serious lag behind the increases in earnings by other strata, or perhaps caught up on them for a short time but did not bring about a permanent improvement in the relative position of the stratum in question. Of course, under such conditions it was not possible for the positive effects to unfold. Without these measures, however, the situation may have become much worse, or even unbearable. It is also true, though, that a fundamental improvement – in addition to raising the salaries – also requires other changes.

**From this point of view the Hungarian practice of organizing enterprise economic work teams (collective ventures of workers' groups for working after the legal working hours) is very interesting. Contrary to expectations, they make less distinction in wages, but they make a selection in employing people. Workers with poor performance are not admitted to the work team.

will be that both requirements and performances will sink to the level of wages. (The leader will be forced not only to accept labour with smaller faculties and lower qualification, but also to acknowledge that the subordinates pursue private tasks at the expense of their duties at the official workplace. This is common experience.)

Differentiation not reflecting the scope of activity or job hinders the differentiation according to performance, too. If the earning of a leader is only a little bit higher than that of people subordinated to him, the possibility to increase the wages of the latter becomes restricted. No leader would welcome the fact that the majority of his personnel earns more than he does; and this is not only a question of vanity! Earning means more or less a rank in the work organization. A leader sniffed at by his environment can only very rarely acquire and maintain the necessary prestige. (Of course, a higher than the leader's earning of one or two subordinates showing really outstanding performance causes no serious trouble. The situation grows harmful only if it becomes a general practice.)

Demanding to differentiate wages in correlation with performance and rejecting to connect them with the scope of work and the job is a specific variant of the levelling attitudes. It can also be attributed to the mechanical adoption of the principle of human and social equality (of the citizens) in the sphere of economy. Human and social judgement may indeed only vary depending on how an individual performs his task; in this view a general manager and a charwoman are equal. In economic judgement, however, also the task must be taken into account.

Central wage regulation as an impediment to incentive

The practical implementation of the principles underlying the wage system and presented above runs into several obstacles in Hungary today. The enterprise is unable to part with the employee poorly performing his task, since, as a result of labour shortage, it cannot employ anyone instead. In other cases — if there are no troubles in replacement — the extraordinary difficulty of the procedure and public opinion will prevent it from doing so.* An expedient differentiation of wages according to both tasks and performance is impeded by similar circumstances. In the cases of certain highly qualified labour categories (e.g. often with engineers) the relative abundance of supply and the scarcity of appropriate tasks are obstacles to developing a desirable wage level. The list could be continued. But there can be no doubt that the most conspicuous obstacle to introducing incentive wages is at present the central regulation of earnings.

Practically any endeavour aimed at implementing an incentive wage system runs against the limits of central income regulation. For this reason every reform movement sets the target of reforming the regulation of earnings in some way.

In the literature several functions of central wage regulation are mentioned. The

*A manager wishing to get rid of an indolent employee by dismissing him will have to face such inconveniences that it is better not to start with it.

type introduced in Hungary has, however, only a single purpose, namely, to control the outflow of wages in order to preserve the balance between purchasing power and the available stock of commodities. The other functions attributed to wage regulation are rather only delimiting conditions: to ensure the equilibrium between purchasing power and the stock of commodities in such a way that it should not too much hamper the efficient employment of labour and, at the same time, should not endanger full employment, and so on. Under such circumstances when no significant internal force is acting within the enterprise which would control the outflow of wages, both senior executives and leaders on medium or lower level behave much more like "trade-union officials"* than like "employers". Since these leaders are trying to achieve the highest possible wages for their enterprise or department, some kind of central wage regulation is indispensable, for abolishing it would lead to an outflow of wages not counterbalanced by appropriate stocks of commodities, i.e., to a disequilibrium between the purchasing power and the stock of commodities and, finally, to an accelerating inflation.

Experience has shown that central wage regulation, be it applied in any form, unavoidably also entails negative consequences. The enterprise is prompted to economize on wages, even at the expense of lavishness in other cost factors. Furthermore, owing to the fact that the regulation affects not the wage cost, i.e., the specific labour cost input of a product unit, but the average size of individual labour incomes,** it restricts the possibility of financial remuneration for different performances, hence, stimulation based on it. *In reality, society is interested in controlling specific labour costs and not the average level of wages.* Any rise in wage level may be favourable which does not imply an increasing share of labour costs and the growth of production costs as a whole. [7]. It has become quite clear by now that in the long run we must follow the line of transcending the special regulation of the outflow of wages and resolving it within the general regulation of enterprise incomes. We must achieve the point where enterprises have to economize essentially on the specific labour costs.

The possible solutions

The opinion is widely professed that central wage regulation ought to be replaced by some way of controlling the gross incomes where the personal income of employees would be directly depending on the economic results of the enterprise. This solution is justified and expedient in the case of small enterprises working on the basis of self-management. But in the case of *large enterprises* for which self-management does not seem to be a progressive form, for it can only be formal, *it would be unjustified to strive to link personal incomes closely to the performance of the enterprise.* Since the

*As formulated by János Kornai.

**This also applies to the wage-bill control system, practically a restriction or a brake is put on the wage level even in this case.

overwhelming majority of the large enterprises' employees are unable to influence the economic results of the enterprise personally in their totality, it would have no stimulating effect to make them interested in profit, it is unlikely that thereby a feeling or attitude of ownership could be created. At the same time — as is also supported by the Yugoslav experience — *this solution is no guarantee for the necessary equilibrium between purchasing power and the stock of available commodities.* Great differences between the incomes of workers of certain enterprise due only to the profits made by the enterprise would call forth strong demand for raising the wages (incomes) even where no coverage for this has been produced. These endeavours are not counterbalanced by adequate counter-forces, thus they would contribute to the inflationary tendencies.*

Consistent progress along the line of the reform and measures to be taken in order to abolish central wage regulation necessitate that some power should be prevailing within the enterprise that prevents the outflow of wages without coverage. This postulates a high cost-consciousness of the enterprise and the creation of circumstances where the customer will only pay for the socially necessary inputs and the enterprise cannot charge the buyer with the increased expenses caused by rising wages. This internal force restricting the outflow of wages also requires a change in the position and interests of the enterprise management. The income and staying in position of the senior executives of the enterprise must depend, — much more than so far — on the long-term development of the profit and on accumulation of the enterprise's assets. At the same time, they must be politically supported in asserting the long-term interests of the enterprise even against the short-term interests of the employees; they must be able and willing to do so. The situation mentioned above must cease to exist, namely that in regard of wage issues managers behave rather like trade-union officials than as executives safeguarding the interests of the enterprise, i.e., the employer.** On the other hand, however, it is the task of the trade unions to safeguard the interests of the employees much more unequivocally than up to now. Both employers and employees should have better possibilities to assert their interests. The diverging interests ought to be expressed much more openly, if necessary, they ought to be allowed to conflict. Conflict and compromises of interests have to play a role in the development of wages.

In regard to the foregoing the question may arise whether the opposed interests of leaders and subordinates, colliding with one another in fields as important as that of wages, will not bring about the danger of social conflict alien to a socialist society.

*Another argument against a close dependence of the workers' income on enterprise profit is that clearly not the *currently* most profitable enterprises need to attract labour but those which are likely to gain large profits *in the future*. (International experience shows that everywhere these pay the highest wages.) To pay higher wages one must not wait until the profit will be realized, they must be paid in advance.

**This behaviour causes troubles not only in wage issues but also prevents leaders from fulfilling the specific tasks of management in other spheres. This role of the leaders may result in forms of behaviour harmful to the interests of society, i.e., mutual indulgence for deficiencies, common skulking, causing damage to the buyer, the user and to social property, etc. This is experienced day by day in many fields of direct contacts between workers and their immediate superiors.

It would be a mistake to exaggerate the conflicts between the interests of workers and leaders. On the one hand, in the final analysis the basic interests of leaders and subordinates are not contradictory even in this respect, since the common aim is a more efficient and successful management, for, after all, the living standards of the whole population depend on this. This basic agreement of interests also prevails within the framework of any enterprise. A successfully working, more profitable enterprise — even if the level of wages does not depend directly on profits — may grant several material advantages to its workers. Furthermore subsistence of the enterprise, safety of the workplaces that are depending on economic success, also under the “reformed conditions”, are obviously the common interest of managers and employees. On the other hand, it would also not be right to overstress the contrasting interests in the issue of wages, because under such conditions the interest of management is not to restrict the wage levels but to reduce, if possible, the specific (unit) costs of labour. It is easy to understand that workers are less sensitive to this, since their personal income is only indirectly connected with the specific wage costs. A more determined safeguarding of the employee's interests by the trade unions and the activity of other forums of democracy within the enterprise can prevent the wage level from being diminished by a closer control on specific wage costs. (Otherwise, the antagonism between the interests of employers and employees can by no means be eliminated, it is only the form of conflict that can be changed. For instance today, when the contrast between immediate superiors and subordinates has become rather blurred, safeguarding the employer's interests is mostly shifted upwards; the interests of employees are limited by official instructions and ordinations and, e.g., in respect of wages, by central wage regulation.)

Trying to mitigate the macro-level problems outlined in the foregoing (labour shortage, the rigid central wage regulations, the ambivalent interests of managers, etc.) may create more favourable conditions for an efficient material incentive in the enterprise. New solutions are, however, also needed within the framework of the enterprise.

The traditional system of wage payment according to performance, i.e., remuneration based on norms (and also its most usual form, piece-wage) contains a rather serious contradiction: the constant fear from readjustment of the norms urges workers to hold back their performance. “The worker would like to earn more, but does not produce more, for he is afraid of the readjustment of the norms. We are able, however, to give higher wages to the worker only for more work, but if he does not produce more, wherefrom can we pay more? He still does not work more, because of the fear from the adjustment of norms. . .” [2]. At the same time, quantitative performance pushes into the background other requirements which also have a direct impact on profitability (quality, material- and energy consumption, etc.). These problems are as ancient as wage payment by norms itself and they have recently become rather acute. Several experiments were carried out both in the Western and the socialist countries to relieve them. One way is to find forms of labour organization where a smaller community can depart from the usual order of the enterprise and acquire a certain autonomy in its actions. In this case the ways

of accomplishing the work are determined by the community itself which is directly interested in the results of the work. Remuneration is independent of the circumstance how many of them and in what time they performed the job, the distribution of the wage is based on a decision by the collective itself. Examples of self-accounting brigades or workers' groups working on the basis of lump-sum wage tickets or paid on the basis of the end product, may be considered as such. The Swedish so-called autonomous groups, or some other solutions too, may be listed here.* Most recently the ventures within large enterprises appeared. "In recent times some capitalist firms like IBM or Rank Xerox have been making significant efforts to develop collective undertakings within the enterprise, for the simulation of enterprising within the enterprise. In our judgement, namely, in certain activities, — first of all in creative intellectual and servicing tasks — competition based on venturing releases supplementary energy,** renders technological development shorter and more efficient, especially in respect of product development." [10]

The precondition for these types of solution is a separate assessment of the output of the collectives. It belongs to the aims of the organizational forms in question that the worker be brought into a "quasi-proprietor" situation, somewhat similar to the status of the owner in which he feels he is working for himself, he is the maker of his own fortune. In Hungary the restriction on the wage level exerted by central wage regulations, i.e., the difficulty to pay the amounts of wages in accordance with performance, inhibited the spreading of these forms.

From among the new forms, the running of an establishment on the basis of a lease contract system took hold only in the commercial sectors, catering and a few branches of services to the population but not in industry. The main form of possibilities created by the large enterprises is the "economic work team" within the enterprise. These work teams carry out their activities after the legal working hours, so to say, in overtime, among other things because this is the only way to circumvent central wage regulations. It is an obvious desire to shift the activity of these economic workteams into the official working hours, after the rigidity of central wage regulations will have been alleviated, so that it could be acknowledged as a main job to work in this form. To allow this, there are also other conditions to be met, beyond the alleviation of the wage regulations. It is e.g. a very important circumstance that at present the large enterprise is not obliged to provide the workteams with permanent work conforming to their capacity: such a commitment is not in force, the quantity of the accomplished work and remuneration for it are adjusted to the emerging tasks. It is difficult to fit an entity like this into the traditional structure of the enterprise; in order to make this possible, also the latter has to undergo essential

*The remuneration of brigades on the basis of the end product is widespread mainly in agriculture, while the lump-sum tickets occur mostly in the building industry.

**Favourable conditions for this were also created by the changes in technological processes. "Rapidly changing technology... on the one hand had led to the appearance of tens or hundreds of thousands of more or less independent small enterprises, to some kind of a renaissance of small-scale undertakings... on the other hand it developed an economic structure where the individual divisions of the enterprise have gained rather high autonomy" [8].

changes. It is also questionable how far the members of a team are ready to bear the insecurity of income.

Whatever direction the development of these small-scale ventures will take, one thing is sure, namely that, *even in the future, only a small part, a fraction of the large enterprises' activity can be channelled into venture-like small organizations with adequate autonomy*. The majority of workers cannot be brought into such "quasi-prioprietary" situation. Neither is it necessary. *The majority prefer to work for a rather moderate but safe earning instead of one promising to be higher but involving risk and uncertainty*. (We must not be deceived by the wide "longing for" the entrepreneurs' high income. This desire is only directed at the high income, and not at its insecurity.) Experience has recently shown that most people are ready to venture only in "overtime", in their leisure-time, and will not abandon their safe job or workplace. This is partly due to a lot of unfavourable reminiscences connected with the handling of private initiative in the past but undoubtedly also to a natural repugnance of the majority from uncertainty. Hence, we must not think only in terms of small-scale enterprising, or seek for solutions merely in this direction.

A part of the highly qualified specialists with outstanding knowledge perform activities the economic results of which can be quantified (developing or designing engineers, technologists, etc.). In their case we could transgress the usual framework of labour remuneration and pay them directly from the economic benefits created by their activity and accurately recorded in accounting, on a commission fee basis, similar to the bonuses paid for inventions and innovations [3]. This could be implemented not only in the sphere of certain technical but also in that of economic (mainly commercial) experts. Under the current conditions a special advantage of this solution is that it does not necessitate separate financial resources, the coverage (and, what is more, its multiple) is provably created by those paid for it.

Only a smaller part of the highly qualified professionals perform activities the economic results and hence the contribution of whom to the common profit of the enterprise can be quantified. For the majority — however valuable their work may be — this possibility does not exist. Consequently, paying them in the form of commission fees cannot be solved. What can we expect then to bring about any significant change, i.e., a greater recognition of highly qualified work? A turn into positive direction can only be expected if the enterprises and senior executives will have much stronger interest in profits and in increasing the wealth of the enterprise. This will prompt them to adequately appreciate the work of the professionals having basic influence on the economic results of the enterprise, — even despite the egalitarian endeavours of the collective. If the restrictions of central wage regulations will not prevent him, a manager interested in the size of profits will not be parsimonious in remunerating those on whom profits depend.* This will be promoted by the fact that under such conditions a wage

*By interestedness of senior executives in profit I do not only mean that their income depends on the development of the economic results but also that their position, post and whole existence stands or falls by it.

competition will unfold among enterprises to employ the best specialists. (Wage competition occurs sporadically in Hungary already in the present days, "enticing" of well-known computer specialists could be mentioned as a good example. The "flow" of qualified specialists shows, however, a direction not so much from the less profitable enterprises to those which have higher returns, than rather from institutions subject to greater wage restrictions to those where the boundaries are looser.)

In all likelihood, the majority of people will, even in the future, under "reform-conditions", work in a more or less traditional worker or other employee status, in a wage system and under wage relations which will be more or less traditional. Quite a lot of reserves is still hidden in this system, too. True, the possibilities of paying task-wages (a wage system stimulating to increase the quantity of production) will be smaller, but the task-wage system is not the only way of stimulation. Occasionally it is tried to pay task-wages even for activities which are from the outset unfit for it, as the worker has no influence on the quantity of work. This will only increase administration and open up possibilities for manipulation. (For example the well-known manipulations with standstills.) In other fields it is just the lack of differentiation by performance which causes troubles, owing partly to the restrictions of central wage regulations and partly to the limited autonomy of enterprise management.

To increase the incentive character of wages also a more marked assertion of the leaders' value judgement and a growing sovereignty of management is needed. In Hungary the enterprise managers live in a system of double subordination: they depend not only on the hierarchic higher levels above them but also on the community directed by them, i.e., the social bodies representing it. Support by the latter is needed both for getting the appointment as well as to survive in it. Hence managers wish to be on good terms with them and they are expected to do so also by their superiors.* Today managers are hampered in differentiating wages in accordance with performance not only by the shortage of labour and central wage regulations but also by the levelling tendencies expressed by the collective in several forms, especially through the social bodies. Any consideration affecting the differentiation of wages other than performance — age, years of service, family relations, social functions, etc. — is an element of equalizing endeavours.**

Under the present conditions even a much stronger interestedness in economic results would be insufficient for prompting managers to set themselves against the levelling efforts. These problems can only be alleviated by further developing both the economic and the socio-political mechanism.

*The above mentioned fact that managers often behave like trade-union officials, advocating rather the interests of the community led by them than those of the enterprise, is due, among other things, to this situation.

**To pay experts playing a key role in innovation from the economic results in the form of commission, (as mentioned above) has, for instance, been permitted even so far by the provisions of law prevailing in Hungary. The spreading of the method has only been hampered by the collective pressure aimed at levelling. It is well-known that managers do not take the responsibility of paying greater bonuses even for inventions, therefore these are often adjudicated by the court.

And what about the incomes deriving from property?

Throughout the foregoing we were dealing with labour incomes arising in the sphere of state- and/or cooperative ownership. Lately in Hungary — beside the dominant role of social ownership — in some fields room has been given also to other forms of ownership, i.e., to small-scale private property and to small group property. In these cases it is no longer valid that “no one can give anything but his work” or that “beyond the personal consumption goods nothing can be transferred into the property of individuals”. These fields are not subject to the wage relations, the work of the individual or the small group is valued directly by the market. Consequently, in this sphere — in contrast to the primary economy — rather great income differentials may occur. The possibility of higher income earned by more, or socially more useful work is here greater than in the state-owned sector.* At the same time it may also be possible to earn high income with little work. It is a matter of course that here, beside labour performance, also circumstances like the relations of demand and supply, what is more, the capital invested may decisively influence incomes.

For instance a part of the artisans' and retailers' income is due to the capital connected with their trade, the premises owned, shops, etc., the measure of their income depends — to rather varying degrees — also on the magnitude of their capital. This is necessary, since their income serves not only for their personal consumption but also for keeping up and developing their undertaking. (Taxation in Hungary takes this into account only to a certain degree.) If we admit that the existence of small-scale undertakings based on small property is justified, we must accept that the capital invested in it will bring a certain income to its owner. Or else, it could not be achieved that the people interested should throw their material assets into the undertaking, as it is necessary for several reasons. (The state has no sufficient capital for financing this sphere; without doing so the interestedness of the enterprising persons would be very limited. Finally, utilizing the property of the citizens for business and production purposes is suitable to curb the wasteful use of high personal incomes while accumulated fortune by people may strongly irritate the masses. In our society, of course, any kind of income derived from property can only be very limited, and only has supplementary significance.

In all probability, implementation of the reform endeavours will entail increasing differences between earnings, — at least as regards the distance between the extreme limits — both in the spheres of state enterprises and cooperatives and also outside of them. This necessitates the introduction and functioning of a personal income-tax system aimed at moderating too big differences — not diminishing at the same time the stimulating effect. Such a system has a great number of preconditions. For example such as an apparatus with adequate staff, well trained and well paid, on a high level of integrity,

*This is why sometimes opinions can be heard that the principle of distribution according to work is more effective in the second than in the first economy.

the adoption of flexible control methods, relentless severity against those who violate the tax rules, etc. Also the requirement belongs here that taxation should include, beside the official and easily controllable incomes, also the various kinds of so-called invisible incomes.* Without that the system would not be all-embracing and would allow several possibilities to evade taxation.

* * *

I have started my paper with the interpretation of distribution according to work as an abstract concept and finished by discussing questions lying — at least seemingly — very far from it. What binds them together is the inexorable reality of things. Further development of our economic reform may bring good results only by taking into account the realities — socio-economic and human realities.

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* Here primarily tips and gifts (conscience money) are meant. In the taxation of such incomes foreign experience may be useful. One of the solutions might be to grant some kind of advantage to the taxpayer. (Imputing them in sickness benefits or pensions funds.)

РАСПРЕДЕЛЕНИЕ ПО ТРУДУ И РЕФОРМА

К. ФАЛУШ-СИКРА

Распределение по труду — так, как это предполагалось Марксом, — не осуществимо. С одной стороны, различные виды конкретного труда не сопоставимы, а, с другой стороны, необходимо стимулирующее, аллокационное воздействие заработной платы. Степень различий в оплате труда нельзя обосновать количественно. Шкала заработков в социалистических странах гораздо уже, чем в капиталистических странах.

В Венгрии заработная плата в настоящее время не покрывает (в большинстве случаев) затрат на воспроизводство рабочей силы, даже вместе с социальными выплатами. Это справедливо и в целом, но в особенности — в отношении отдельных слоев. Специфические потребности тех, кто выполняет особо высококвалифицированную, умственную работу, не находят отражения в пропорциях заработной платы. Два существующих принципа дифференциации заработков — в зависимости от исполняемых трудовых обязанностей и в зависимости от результативности выполняющих одну и ту же работу — равным образом необходимы. Неправильные пропорции в оплате работников различных профессий, выполняющие различные трудовые обязанности ведут к контрселекции. Зарплата прежде всего должна отвечать требованиям, связанных с трудовой задачей и лишь в рамках этих требований — отражать индивидуальную выработку. Слабая дифференциация оплаты труда в зависимости от трудовых обязанностей или должности замедляет и дифференциацию заработков в зависимости от результативности работы.

Самым непосредственным препятствием для стимулирующей оплаты труда сегодня в Венгрии является централизованное регулирование заработков. Ослабление централизованного регулирования оплаты труда возможно при условии, если на предприятиях возникнут силы, ограничивающие, препятствующие выплатам заработков без покрытия в выработке. Для этого необходимо изменение положения и заинтересованности руководителей предприятий. Необходимо покопчить с положением когда руководители предприятия ведут себя при решении вопросов оплаты труда скорее как профсоюзные работники, а не как представители интересов предприятия, работодателя. Руководители предприятий должны быть гораздо больше, чем теперь, заинтересованными в прибыли предприятий и росте его фондов. Кроме этого, для повышения стимулирующего значения заработной платы необходимо, чтобы более решительно проводились в жизнь решения оценки руководящих работников, повышался суверенитет руководителя. Условием этого является одновременное развитие хозяйственного и общественно-политического механизма.

Часть доходов мелких ремесленников и торговцев связана с имуществом, необходимым для их занятий, с собственностью на мастерскую, лавку и т. д., величина их дохода зависит также от размеров их капитала. Если признается право на существование мелкого предпринимательства, связанного с мелкой собственностью, то необходимо принять к сведению, что вложение в эту деятельность приносит собственнику определенный доход. Возникающую дифференциацию личных доходов можно смягчить с помощью соответствующей системы налогообложения.

CONCEPT OF THE STATE BUDGET FOR THE NEW PHASE IN HUNGARY

I. HAGELMAYER

The following study gives an analysis of the changes in the state budget in the period between 1967–1982 (its proportion to GDP, changes in the structure of expenditures and revenues, growth of different items, etc.). Through the whole period, except for two years, the proportion to GDP was higher than 50 percent. The structure of revenues did not change much, while expenditures showed massive fluctuations. The author arrives at the conclusion that redistribution must be decreased and the mechanism of allocating subventions must be changed. In order to control inflation he finds it expedient to form a budget surplus while improving external equilibrium.

The “new phase”, if it is derived from the changes in world economic circumstances, has not begun *now*. We have been living and working in Hungary under new conditions ever since the end of the first third of the 1970s, only it took time to *realize* this and the loss of precious years is hard to make up for. Realization was followed by a reformulation of the system of economic policy objectives at the end of the previous decade. However, the choice of the right *means* expected to serve the *implementation* of objectives adjusted to the new situation and sometimes chosen under duress were received with grudging apprehension and sometimes assaults from the side of professional media – and the results could provide reason for criticism: although the difficult situation could be resolved (for example in 1982), the self-generating processes that ought to be carriers of the *guarantees* of adjustment to the new situations failed to start in the *economy* while in *society*, *uncertainty* reflecting a blurred picture of the future was prevailing instead of *identification* with objectives which should inspire activity.

This is why the *new* recognition could proliferate, i.e., that the line so far pursued (in government control, planning, regulation, etc.) could be suitable for putting the fire out but it is not able to prevent it – the repetition of crisis situations – from eruption. The *mobilizing power* of objectives has become less convincing – a longer stagnation of the standard of living cannot evoke enthusiasm even if it is adorned with the adjective “preservation” – whereas the critical evaluation of the means used already convinces as of the inadequacy of the methods applied and the need to do many a thing in some other way. “In some other way” does not deserve a positive sign in itself. However, the guideline that has by now been incorporated in decisions shows that it is our intention to better the commodity (market) and money relations, to enhance enterprise autonomy and responsibility and to strengthen in economy and society.

This is what I would consider to be the "new phase", with even its beginning ahead of us and with an unforeseeable end. A new *process* is just beginning and the only statement one may possibly venture about it in the light of our social and economic problems is that the sooner it is started the better. Maybe then we will be able to formulate a set of social and economic policy objectives anew, narrowing the distance between opportunities and requirements, and earlier than we can now be expected to.

All the above are also the concern of the state budget since the changes and processes taking place in society are reflected in the *magnitude* and internal *proportions* of revenues and expenditures, especially when they affect the role of the state related to monetary processes. At the same time the government revenues and their changes may alter the originally established *income proportions* while the state expenditures have their influence, depending on volume and internal proportions, upon the development of the structure of demand, the position of economic units, as well as on the standard of living, health, education and the social situation of the members of society. This rough and undetailed list is enough to show that, owing to the nature of the system and to the expansion of the role undertaken by the state in "happier periods", the budget is significantly present in everything that is usually given the collective name of "quality of life". From the point of view of shaping the future the "recent new phase" is of importance but in the interest of pondering the lessons it may not be unnecessary to indulge in a brief review of the budgetary changes of the period behind us. (Any comparison raises methodological problems, too, and this is particularly true when budgetary time series are evaluated.) It can be highly relevant to survey the changes in the magnitude of *total* budget receipts and expenditures through a longer period of time, for this, on the one hand, affects the income position of tax payers (till now in Hungary mainly the economic units), that is, their scope of activity as backed up by money income, their intentions and opportunities and, on the other hand, it affects through the volume of expenditure all the social and economic states and processes where the state is present with its demand or with its subvention system established over time. That is, it shows how much the *state* is built into the monetary processes that alter and influence the original positions. (But this is not identical with state *intervention* since the latter is known to have a number of other forms circumventing monetary processes.)

Development of budget revenues

I found it convenient, also for the sake of international comparability, to compare the total of the budget revenues (exclusive of credits) to GDP. Before reviewing the data of the period between 1967–1982 I had supposed that the proportion of budgetary revenues to GDP is significantly affected partly by the 1968 reform of the system of economic control and management (this is why the year 1967 was chosen as reference) and partly the external impacts to which our economy was exposed. (See Table 1.) This can only partly be verified on the basis of the figures. Although the proportion of

budgetary receipts to GDP really *decreased* from 51.1 percent in 1967 to 47.3 percent in 1968, thereafter it steadily increased year by year and in 1974 it reached the highest ratio of the period under study (57.4 percent), to subsequently show some slight fluctuation almost yearly on a somewhat lower level, both in positive and negative directions (lowest in 1982: 54.8 percent). At any rate, it can be stated that *after 1971 the centralization rate was higher in every year than in the year preceding the change in economic control methods*. It is worth noting that this rate was ranging in OECD countries between 30 and 35 percent in the same period, but it was generally rising also there.

Table 1
Characteristics of budget receipts (excl. credits)

Year	Change over preceding year	Proportion to GDP	Change of GDP over the previous year
		percent	
1967	—	51.1	—
1968	98.5	47.3	106.4
1969	108.7	48.3	106.4
1970	111.2	50.5	106.4
1971	108.8	50.6	108.5
1972	109.7	51.3	108.4
1973	111.0	51.9	109.7
1974	115.8	57.4	104.6
1975	106.6	57.1	107.3
1976	106.6	55.5	109.6
1977	111.1	56.0	110.0
1978	107.2	55.5	108.2
1979	109.8	56.3	108.4
1980	103.7	55.3	105.5
1981	110.9	56.5	108.5
1982	105.4	54.8	108.7

Furthermore, I had assumed that the changes mentioned earlier altered the relative *proportions* of budget revenues, i.e., that the different income holders were affected by the changes to *different degrees*. Analysis of the time series shows that although some small shifts in proportions can be stated, yet these get "restored" in certain periods and do not reach a hard-to-define critical degree giving ground to any appreciable inference. I do not expect it to be surprising that the share of *payments by enterprises* (inclusive turnover tax) was always over 80 percent of the revenues calculated without credits. Although this share decreased in 1968 to 84 percent as against 87.5 percent in the previous year, it was ranging around 85 percent with negligible fluctuations in the entire following period. During the past years the share of payments by the population somewhat increased, amounting to 5.2 percent in 1967 and to 6.7 percent in 1982. The

share of every other revenue remained below five percent. Considering the relative proportions of the main revenues of the budget, *no characteristic shift can be recorded*. I nevertheless find it worth noting two symptoms which can probably be regarded as the roots of future efforts. Firstly, from 1979 on the *share of turnover tax increased* in enterprise payments; secondly, *income taxes linked to wages* (social insurance contribution,* wage tax,* pension fund contribution etc.) represented a steadily growing weight. The first one may be regarded a step towards a value-proportional price system, while the latter one, though adding to the costs enterprises have to pay for labour and thereby, presumably, encouraging rationalization of management, means a *separable* money resource providing alternative opportunities for *future decisions*.

With respect to the revenues of the budget the following theses can be laid down in *summary*.

— The revenues of the budget showed relatively high proportions to GDP and a stability that can safely be regarded as constant for a decade except for the first third of the 1970s.

— In the relative proportions of budgetary receipts shifts of *appreciable* degree cannot be stated: the enterprises' share of 85 percent has become settled as a kind of a "standard", while the share of payments by the population is low but somewhat increasing.

— The growing weight of two categories, namely, of turnover taxes and income taxes *associated with wages*, indicate a substantial change and perhaps allow to conclude on future endeavours.

Development of budget expenditures

Much greater changes and shifts can be observed in budget expenditures. It would be convenient to review the *annual changes of each item* (average growth rate, annual changes, proportion to budget expenditure, i.e., to GDP) but perhaps it will be sufficient to note here a few typical tendencies.

The *first* striking symptom noted in the analysis of data is that the yearly change of almost every expenditure item shows *strong fluctuations*. The following examples are given to illustrate this.

It may be argued that the part of the period chosen was just one in a long time series when the burdens of uncertainties in economic policy and regulation were the heaviest, and quite different results might be obtained by extrapolation of the time series. This is partly true, however, the periods preceeding and following the selected five years also indicate fluctuations, even if of somewhat damped degree.

My *second* inference is the following: although in the period 1968–1982 alternations of decreases and increases may be observed for almost every important item

*Paid by the enterprise – Ed. note.

Table 2
*Changes in and proportions of a few items of
 expenditure between 1972-1976 (percent)*

Year	Annual change	Proportion to total expenditure	Proportion to GDP
<i>Expenditures on accumulation:</i>			
1972	+ 5	14.9	8.1
1973	- 6	12.8	6.9
1974	+17	12.3	7.8
1975	+24	13.7	9.0
1976	0	13.4	8.2
<i>Current subventions to enterprises and cooperatives:</i>			
1972	+ 2	15.0	8.1
1973	+26	17.3	8.4
1974	+66	23.5	14.9
1975	+ 1	21.4	14.1
1976	-14	18.0	11.0
<i>Consumer price subsidies:</i>			
1972	+ 6	8.8	4.8
1973	+21	9.7	5.3
1974	+10	8.8	5.6
1975	+11	8.8	5.7
1976	+26	10.8	6.6

of the expenditure, the spending structures of social insurance and of the budgetary organizations *profoundly* changed. Once again I should like to give examples for illustration.

Table 3
Budget expenditure proportions (percent)

	In total spending			In the GDP		
	1968	1975	1982	1968	1975	1982
Accumulation	15.4	13.9	4.6	7.3	9.0	2.6
Current subventions to enterprises and cooperatives	16.2	21.4	15.3	7.7	14.1	8.6
Consumer price subsidies	9.2	8.8	13.5	4.4	5.7	7.6
Spending of budgetary organizations	29.7	25.3	29.8	14.2	16.6	16.8
Social insurance	12.7	14.2	20.7	6.1	9.3	11.6

The items listed cover nearly 85 percent of budget spendings. As can be seen, the share of spending on accumulation substantially *diminished* and that of spending related to social insurance substantially *increased*. However, the weights of current subventions and consumer price subsidies were still high. Moreover, the *aggregate share* of these two items was even growing (1968: 25.4; 1975: 30.2; 1982: 28.8 percent).

A change that can be regarded essential occurred in the spending structure in the late seventies and at the beginning of the 1980s, i.e. following the modifications of economic policy objectives. The tendency to be traced in the structural changes partly reflects the economic policy endeavours but also the difficulty of compliance with, and falling short of, the objectives can be stated. This is well illustrated by listing the growth rates of the said items:

Table 4
Changes in the main items of the budget
(percentual change over the previous year)

	1979	1980	1981	1982	Average change
Accumulation	+ 9	-18	-16	-28	-20.7
Current subventions to enterprises and cooperatives	+ 7	-16	+ 5	+ 1	- 5.4
Consumer prices subsidies	+ 6	+25	+15	+ 3	+14.1
Spendings of budgetary organizations	+ 6	+12	+ 9	+ 9	+ 9.8
Social insurance	+18	+17	+16	+ 9	+14.0

The containment of domestic consumption was accompanied by a very powerful and enhanced reduction of spending on accumulation; the growth rate of current subventions diminished (of course it may be a point of argument whether this is sufficient or not). The same can be stated about consumer price subsidies; although the spendings of budgetary organizations and of social insurance increased on a high level but at declining rate.

The shrinking of spending on accumulation appeared in the budget following the *cut in investment*; the high rate of current subventions indicates unsolved problems of the improvement of *efficiency*, the slackening rate of growth notwithstanding. The spending of budgetary organizations and of social insurance as non-negligible factors in the preservation of living standards increased every year at a steady though declining rate, *exceeding* the rate of budgetary receipts (by the way, this holds for the entire period between 1968 and 1982!).

The title "spendings of budgetary organizations" covers several expenses that differ from each other with respect to public importance and function. From the point of view of attaining the social policy objectives, the development of spending on health care and on education and culture are of prominent importance. The average rate of growth was

ranging in both spheres around the value of 12 percent in the last few years (1978–82) while the relatively high growth rate gradually declined.

The fast growth of spending of budgetary organizations and on social insurance can be maintained, and this may be the *third* inference, if

- the economy is in a position to *increase* the national income at a rate permitting a certain increase of domestic consumption without deteriorating the external balance and/or

- the opportunity is given for *further changes* in the internal proportions of the spending structure in favour of the human sphere in the broadest sense and at the expense of the economic sphere and, at the same time, if,

- in stating the order of requirements qualified as really of public concern, simultaneously narrowing the gap between demand and possibilities, a way is found in financing to devote maximum care to human interests following from the order of values of this society and at the same time to enforce the requirements of rationality.

Reflexions about the magnitude of redistribution

Concluding the short analysis of the revenues I find that the ratio of incomes taxed away from enterprises is relatively high and, consequently, the same qualification holds for the magnitude of budgetary redistribution. I arrived at this conclusion with respect to receipts because it exceeds 50 percent of GDP, the proportion of income available to enterprises is small, and the ratio of subvention is high in enterprise profit. It is characteristic that the proportion of net income taxed away was ranging between 78 and 80 percent through the whole period while the ratio of subvention to net income was about 35 percent (but between 1974 and 1978 it was near 50 percent, then, after a subsequent steady decrease it “settled back” to the level of 35 percent). This indicates considerable redistribution. Without indulging in a thorough analysis of the enterprises’ income position, which I know reduces the credit of my opinion, I assume that the income retained does not leave satisfactory opportunity for an “enterprising enterprise”. It is “too little to live and too much to die”, as some enterprise managers put it.

The magnitude and proportion of taxes becomes acceptable in spite of the problems noted and those not noted when it can unambiguously be proven that *without* the redistribution appearing in budgetary expenditures worse disturbances would have been induced in the functioning of society and economy than those to be faced now. Therefore the question whether the rate of redistribution is really high may be asked after having reviewed the expenditures too. I cannot give a clear answer to this question. Demand for cutting *subventions* is always the first one of recommendations on alterations concerning the economic sphere and this is a regular and recurring task in administrative work because it is unsolved. If I said in the preceding pages that the high rate of subsidies also indicates efficiency problems of economy, then I now venture to reverse my statement and declare that subventions temporarily “hide” poor efficiency and thus they

do not press towards an enhanced profitability of production. In this approach, however, *the share of redistribution is high* within the economic sphere because it does not enforce the accomplishment of one of our most important economic policy objectives, i.e., the improvement of efficiency. It is easy to formulate the conclusion which, by the way, I also deem necessary, namely, that in the future we must work more steadfastly for containing subventions. I suppose it cannot be interpreted as rejecting the objective if I make reference to the hardships of fulfilment. Firstly, the well known limits to substituting uneconomical production through imports *today* narrow down the sphere of *otherwise* rational decision-making; on the other hand, it should not be left unsaid that the given level and structure of *employment* have been built upon the given structure of production where any shift, also the necessary and rational shift, entails changes in lives of individuals and strata and these changes are often accompanied by conflicts. It has been reiterated in Hungary that the enterprise should be expected to be able only of efficient employment, while the task of full employment is one of the state, but we cannot believe this task to be easy to solve. I still believe that the raising of efficiency, also enforced through the cutting of subventions, is a public interest of such scale that the implications of its violation may well provoke conflict not in given groups but in the whole of society. Just because subvention itself, its distribution and reduction alike, affect wide public and economic interests, it may be important to transform current subvention into a non-recurrent development subvention wherever this is practicable. It would be of even higher importance to transform the distribution mechanism of subventions in a way to assure the openness of distribution depending on socially accepted objectives, a democracy whereby also the confrontation and acceptable harmonizing of interests would be guaranteed, that is, to curb the way of redistribution which is often unfathomably based on personal contacts and position.

This is the place where the so-called "regulation through special ordinance" should be mentioned. This provided the opportunity in state administration and especially on its lower grades to grant *favours* which naturally do not appear among subventions but which could hardly be regarded a "quite different" category from the point of view of their economic impacts. This is also redistribution but it evades the budget. Its proliferation also threatens with the replacement of eventually diminishing subventions by extending favours. I can go still farther (hoping to be unreasonably pessimistic): the proliferation of "regulation through ordinance" might result in or come close to a state of affairs where the loosening *sectoral* subordination is replaced by state paternalism manifesting itself in the practice of a *functional* organization. In principle this construction provides opportunity for a *quick* solution of smaller *problems* and I do not want to challenge that this is occasionally justified, but I still believe that the measure, the goal, and the expected result require accurate regulation and social control.

When we meditate about cutting subventions we must not forget the fact that the *majority* of subventions now appear at three points of the national economy: in consumer prices, in agriculture and the food-processing industry, as well as in exports. These areas strongly affect the *standard* of living, resp., our interests attached to the

boosting of *exports* It is of course true that there are also *other ways* to enforce the interests attached to living standards and enhanced exports. However, it is at least as clear that a linear or even differentiated reduction of subventions does not promise by itself any satisfactory results.

So I assume that redistribution is too big in the economic sphere and thus it is reasonable to reduce it, along with a transformation of the distribution mechanism. I also noted the objections and difficulties.

Redistribution channeled to the *human sphere* (health, education, culture, social insurance) has in the last decade *regularly* surpassed the growth rates of national income and the receipts of the state budget. So I could even say that, considering that redistribution is here *high* and even *growing*, and it is about to run into the budgetary limit determined also by the economy, it is consequently reasonable to reduce it. However, this would be a defective answer for, beside the literature on the subject, also daily experience testifies to the fact that nearly *every field* is lagging behind and the absolutely not exaggerated requirements are not met. Redistribution is the highest in this sphere — and much more would be still not sufficient. Over and beyond moral considerations it could be raised, and with justification, that the limited satisfaction of demand in this sphere produces negative repercussion on the *present* economy (a person who is cured slowly will go back to work later) and it also endangers the development of the *future* economy (a person who receives imperfect training at school and is only given bits from culture will show poorer competence at work and cannot satisfy the requirements of advancing technology). Moreover, the public atmosphere of working people suffers if the burdens of rearing children are too heavy in comparison to income, or if one must expect that one's future pension, which will *ab ovo* be less than current income, steadily loose from its real value. Indeed, the problems are depressing and *real* but, alas, the economic opportunity is not an *imaginary barrier* either.

If I had a formula that could at least promise a solution I would not keep it secret. Nor can it be comforting that welfare states, far more advanced than we are, are facing similar problems on higher income levels. [1]. Only a few imagine a society as a panacea to relieve or eliminate all pains where all goods and services presently in the scope of social care would be relegated to the world of commodities and thereby distribution would be fairer and demand would be better met. On the other hand, several economists are of the opinion that strengthening the *commodity character*, that is, accepting to pay part of the costs, could result in a use nearer to optimum and in better satisfaction.

What is certain is that, particularly in recent years, there has been a limited scope of opportunities and, therefore, it is reasonable and even necessary to confront *demand* with *opportunities* and to devise solutions to *help*, or at least not to counter, the implementation of our social and socio-political objectives. Part of this study might be concerned with finding out whether the amount allocated from available income is *sufficient* for achieving the given objectives or not (and, of course, to the detriment of what it could be increased), with the manner of the operation of the distribution mechanism *within a given sphere*, and whether the different interests are actually

represented and are under real *public (social) control*. It is similarly important to decide which of the requirements now qualified as social and met by the community could be regarded of a type where *absolutely free* allocation is justified and which are the fields where *partial* charges (at this point also the degree is important) and eventually *differentiated* charges [2] depending on income, i.e., also considering social aspects, could be accepted, or where costs should be fully recovered. Treating certain spendings as *funds* within or outside the budget (e.g. social insurance) where the source of formation can be identified and provides "sufficient" income is another point to be studied.

I share the opinion of those who assume that in the quest for solution the short-range fiscal interest, or, in other words, the consideration of "what is cheaper for the budget" must not dominate, but I should also like to add that with *unchanged* economic growth and unchanged social and socio-political constructions the budgetary barrier will inevitably appear.

External equilibrium and the state budget

In the period following the changes in the external conditions of the Hungarian national economy (1973–1978), a time that could also be called the age of "slow recognition", domestic use (consumption) regularly exceeded the magnitude of incomes generated and this was practicable because of the loans raised abroad. The state budget also participated in this surplus consumption. We have got acquainted in practice, too, with a category that used to be considered impossible in Hungary and quite clearly condemned by the socialist monetary theory, i.e. a *budget deficit* presented itself. The *cause* of its occurrence and its *impact* on economic processes were discussed and the ways of its *reduction* were sought.* Most of the parties to the debates, though not always explicitly, objected to the economic policy declared to be unaltered while circumstances had *substantially altered* — others thought to find the cause in the *wrong ways of financing*.

The economic policy proclaiming the primary importance of external equilibrium and the following practice created new circumstances and we must reckon with its implications also from the point of view of the budget.

Exports in excess of imports, i.e., the difference between the two, indicates how much domestic use is *smaller* than output (production). However, the increment of income expressed in forints of the economic units will be *more* by precisely this amount. This means that while domestic use is less than the national income produced, *potential demand* expressed in forints rises by exactly the same amount. Thereby a further inflationary pressure is exerted on the economy already fighting inflation with difficulty, and this cannot be balanced unless the accumulation of money, i.e., saving by all income earners equals the balance of exports and imports. An increasing saving propensity must

* A good review of the debate is given in [3].

therefore be encouraged, but we must not indulge in illusions. We cannot reasonably expect any appreciable increase in *personal* savings, due to logical reasons. The increase of *enterprise* saving is similarly difficult to presume, also due to the natural response to incalculable and repeated levies. So nothing is left but to accumulate money through the budget, i.e., a budget surplus. In the medium of countless problems to be solved this may be considered an irrational postulate by many, since the surplus of budgetary receipts makes the *illusory* impression as if the opportunity for solution were given, whereas the number of alternatives is small to undertake the burden of problems to be solved along with an accelerating or a controlled inflation. Budget surplus is a *condition* of controlled inflation, and it assures balanced circumstances for creating the conditions of *real* solutions.*

Budget and income regulation

It is suggested by an outline of relations between the situation of foreign trade and the budget that the budget plays an important role in shaping *aggregate demand*, i.e., it also influences the changes in the purchasing power of money. The *system of income regulation* is expected to serve the restriction of domestic consumption as well as the implementation of the plan, also keeping certain main proportions. The most frequent complaints made in Hungary against this system are the following: it is too *frequently altered*, it is *incalculable* with respect to its measures and alternative solutions, and is *overcomplicated*, not easy to understand even for experts. Enterprise strategic planning is therefore difficult; owing to earlier made commitments enterprises might find themselves in financial difficulty. So the enterprise sector whose payments contribute 85 percent of budget revenues is in a vulnerable position against the state *administration* and has no effective representation in the organizations of state power. When the budget is enacted the decisions concerning regulations have *already* been made, their enumeration provides information to parliament, and, as a corporate body, it has no knowledge about changes taking place during the year. As a matter of fact it is a recurring symptom in state administration to ask the question as early as the first quarter is evaluated: what measure needs to be taken? And here in Hungary, the amending of regulations is of prominent importance in the sequence of measures. The following two, usually intertwined, arguments are the most common prior to alterations: forecasts had not been well established (unfavourable development of exports, slower than planned growth of production whereas more pronounced price increases, etc.), and thus unaltered regulators cannot guarantee accomplishment of the plan. By now the natural response to failure to keep to the plan has become the correction of regulators. It is certainly not easy to draft perfect plans, all the more as they also contain desires which are not fully supported in

*A more detailed presentation of this subject, covering more aspects than those mentioned here, is given in the paper of Tibor Erdős [4].

reality and which are promoted to requirements; there are indications that the climbing of prices could not be stopped and thus there is enough reason to carry out operative interventions and to make changes in regulators.

Recurrent neuralgic points of regulations are the setting of limits to *accumulation* as well as restriction on *wages and wage-like* payments. Neither of the above is an end in itself, both are aimed at a smaller domestic use than the national income produced, with the obvious assumption that what is not used domestically can be exported. However, the result is doubtful from several points of view. Although the taxing away of part of the enterprises' accumulation fund formed from after-tax profit, and the repeated burdens on its use make it possible to attain the proportions that are, or are supposed to be, desirable in enterprise accumulation; yet the price to be paid for it is a growing uncertainty of the enterprise which the enterprise experiences not as a growing *market* requirement on account of changing economic conditions but as an act of the state administration felt as a shock. Also the regulation of wage rises on macro level is suitable for the planned shaping of a part of public demand, but in this case the *incentive* function of wages to stimulate better work is marred. As a frequent outcome, also the national income increases more slowly than planned and the improvement deemed necessary in the external position is delayed.

The second observation I would make is that, in the interest of the said objective, correction of the enterprise development fund is made *afterwards*, probably because the factors shaping it (price, profit) are not sufficiently influenced by market conditions; whereas wages are regulated *prior* to processes, probably because here there is no way of any *ex post* corrections with respect to wages outflow, except by raising prices.

The third remark is the following, and it can be regarded to be deliberately exaggerated: in Hungary the regulation of business is onesidedly a matter of the "revenue side", that is where corrections are made yearly or also during the year, and we pay little attention to the fact that the budget helps realize goods and contributes to enterprise returns with its total expenditure, i.e., it affects the market processes. It deserves thorough analysis to study whether a reduction of the level of budgetary spendings or a further alteration of its inner structure might not lead to a better or at least complementary way of solving the said problems. The state budget is also a component of aggregate demand and, therefore, the budget must not be neglected in controlling demand either; of course not in isolation but together with the monetary sphere.

Instead of a summary

I have by far not written about every essential problem and those covered are not discussed exhaustively enough. Blame can be put upon me for not having dealt with funds outside the budget and especially because I have not raised the problems and development opportunities of (local) council autonomy and council finances. About the latter I should like to state in brief that I deem it inevitably necessary to create real

financial autonomy, for without it it is impossible to expect a *real autonomy* of powerful influence upon the public atmosphere. However, I am also aware that to create financial autonomy is not merely a matter of desire, it is not an easy task to establish it and it equally concerns problems of planning, regional development and allocation.

The "new phase" is still ahead of us. The further development of financial regulators and reassessment and implementation of the entire budgetary policy will be surely put on the agenda. The financial apparatus and research workers are already engaged in this work. I hoped to contribute to this work by raising a few problems above. It needs the concerted work of many to formulate a budget policy promising better results under the new circumstances than the current one.

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КОНЦЕПЦИЯ ГОСУДАРСТВЕННОГО БЮДЖЕТА В НОВОЙ ФАЗЕ РАЗВИТИЯ В ВЕНГРИИ

И. ХАГЕЛЬМАЙЕР

В статье анализируется то, как складывался венгерский госбюджет в 1967—1982 гг. (его доля в валовом отечественном продукте, изменение структуры расходов и поступлений, рост отдельных статей и т. д.).

Доля поступлений, не считая кредитов, в валовом отечественном продукте за весь период превышала 50%. Это весьма высокая и, что примечательно, стабильная доля. В пропорциях бюджетных поступлений не произошло значительных смещений, 85-процентная доля предприятий стала почти «нормой», доля поступлений от населения низка, хотя и несколько растет. О существенных изменениях — что дает основу сделать выводы и на будущее — свидетельствует возросшее значение налога с оборота и начислений на заработную плату. В противоположность этому ежегодное изменение почти всех расходных статей бюджета свидетельствует о значительных колебаниях, причем существенно изменилась также и структура бюджетных расходов. Значительно упала доля расходов по накоплению и существенно возросла доля по социальному страхованию. Все еще высока и доля текущих субсидий и дотирования потребительских цен. Доля дотаций по отношению к чистому доходу колеблется вокруг 35%.

На основании всего этого можно констатировать, что степень бюджетного перераспределения весьма значительна и весьма обосновано ее сокращение, хотя едва ли можно ожидать быстрых изменений. Можно выбрать путь сокращения дотаций сфере экономики (потребление, сельское

хозяйство, экспорт) наряду с демократизацией механизма распределения, повышения его открытости. Не менее важно решить, какие из считающихся в настоящее время общественными — лежащих на общество — потребностей должны и впредь удовлетворяться бесплатно, где можно ввести частичное и дифференцированное возмещение и где можно ожидать полного покрытия затрат. При неизменных темпах экономического роста и функционирования нынешних общественно- и социально-политических конструкций неизбежно появления бюджетного ограничения.

В последние годы внешнеэкономический баланс венгерской экономики несколько улучшился. Превышение экспорта над импортом (разница между ними) повышает денежные поступления хозяйственной сферы. Если это не будет сопровождаться ростом денежных сбережений предприятий и населения (а на это мало надежд), то бюджет должен стремиться к суффициту. В противном случае уровень цен будет продолжать повышаться.

В заключение в статье рассматриваются экономические регуляторы, касающиеся предприятий. Автор отмечает, что они часто меняются и затрудняют стратегическое планирование предприятий. Предприятия, дающие 85% поступлений в госбюджет, находятся в подчиненном государственному административному аппарату положении, и их интересы по существу не представлены в органах государственной власти. При утверждении годового бюджета решения об экономических регуляторах, касающихся предприятий, уже приняты, их перечисление дается парламенту лишь в порядке информации, а об изменениях в течение года он как коллективный орган государственной власти даже и не знает.

DEBT POLICY OF THE SOCIALIST STATE

P. MEDGYESSY

Relying on Hungarian experience it is stated in the study that even budgetary equilibrium or surplus may conceal economic disproportions, while a dynamic, balanced economic management may be imagined with deficits, too. Therefore, debt policy of the state may not be separated from economic policy and budgetary equilibrium may only be interpreted together with equilibrium relations of the entire national economy. The Hungarian budget has shown deficits ever since 1968 and in the course of years government debts of about 40 thousand million forints (6 percent of current expenses) have accumulated. The narrowing down of foreign financial sources has required strict limitation of domestic demand since the early 1980s which has become mainly a task of the budget owing to the particular features of the Hungarian financial system.

What is meant by debt policy of the state?

The financial situation of a state is usually interpreted through the position of the budget. Most people believe that states and governments follow a proper economic policy if their budget is in equilibrium. Of course, life often forces to solutions other than the ideal one.

Government debt policy may be interpreted in a narrower sense, meaning how already existing debts are treated by the state, and in a broader sense as a policy of budgetary equilibrium (i.e. whether the state undertakes budgetary deficits at all). As a first step we would start from the broader sense.

According to the standpoints of a group of theoretical economists a budget in equilibrium is the exclusive indicator of good management, general financial and economic equilibrium, a condition of stability of the value of currency, the guarantee of harmony between financial and material means as well as of being able to mobilize reserves. [1] Those representing this view are convinced that central government control is able through planning to keep the economy consciously in a continuous state of equilibrium as regards material processes. Therefore, the strict requirement of equilibrium is also given for financial processes which are subordinated to the real sphere.[2]

From the practical side, the principle of budgetary equilibrium was supported by the observation that in capitalist economies a close relationship can be found between inflation and budgetary deficits. According to monetary theory considerations referring to socialist economy, too, the money issued through credit and granted to the budget is

paper money with no backflow mechanism (quantitative self-regulation), thus it upsets equilibrium between commodities and money and may trigger price increases. On the basis of all this in socialist economy striving after stability of prices and money the necessity of budgetary equilibrium was formulated as an elemental requirement. [3]

Evaluating almost 40 years of economic development Hungarian experiences indicate that budgetary equilibrium is not necessarily an indicator of harmonic economic development; even a budgetary surplus may conceal disproportions, while dynamical, balanced economic management may be possible with deficits, too. An analysis of published international data also indicates that equilibrium sometimes results from such financial operations that practically involve government debts. [4]

Development of Hungarian budgetary deficits

The Hungarian budget has shown deficits since 1968. In the 1970s the deficit did not reach 1 percent of GDP, but it proved to be unusually lasting. It had first appeared simultaneously with the economic reform introduced in 1968, though, on the basis of many-sided analysis, it was not a consequence of the latter, but was only brought to surface by it. The increased enforcement of commodity and money relations and the growing role of stimulation accompanied by existing deficiencies of market control only made already previously existing tensions more apparent which also appeared in budgetary deficits. At that time Hungarian economic leadership judged that this phenomenon would almost automatically disappear precisely as a result of favourable processes brought about by the reform. However, budgetary deficits repeatedly emerged from year to year.

The problem of deficits became a key-issue when the oil price explosion and world economic crisis reached Hungary, too, and preservation of the inner stability of the economy required enormous budgetary sacrifices. Maintaining the previous proportions of deficit gradually consumed the financing reserves mobilizable by means of budgetary policy, while the entire economy made use of considerable external credit sources, too. The thus developed situation and the analysis of expected processes forecast the danger of a more powerful deterioration of budgetary equilibrium than previously. Then, in the second part of the 1970s the attention of Hungarian theoretical and practical experts turned to problems of budgetary and general equilibrium.* In the early 1980s — thus, when the overall scarcity of credit to be raised on international money markets was added as a new problem to already existing ones — the state did no more dispose of earlier budgetary policy reserves. Even despite increased income centralization and the cutting

*Related views of Hungarian theoretical researchers and practical specialists are reviewed in a summarized form by Mihály Kupa in [5].

down of expenses the ratio of deficit as compared to GDP increased already in 1980, then in 1981 exceeded 1.2 percent and in 1982 1.4 percent of GDP, (Cf. Table.)

Owing to deficits having become permanent government debts increased in the course of years from a low level to about four and half-fold and now amount to about 40 thousand million forints. Debts were financed by credits of the issuing bank until 1982. As a new practice also bonds to be bought by financial institutions were issued in a value of 8 thousand million forints in 1982 and 2.8 thousand million forints in 1983.

Development of budgetary deficits

	Deficits in thousand million Ft	GDP in thousand million Ft	Deficits/GDP in per- centage
1970	3.78	332	1.14
1971	3.30	361	0.91
1972	2.62	391	0.67
1973	1.83	429	0.43
1974	3.49	449	0.78
1975	2.96	481	0.62
1976	2.49	528	0.47
1977	3.53	581	0.61
1978	3.48	628	0.55
1979	3.60	681	0.53
1980	4.50	718	0.63
1981	9.50	774	1.23
1982	12.22	848	1.43
1983	6.09	898	0.68
1984 (plan)	3.50	964	0.36

Anyway, the accumulated stock of debts may not be regarded as exaggerated. It amounts to altogether 6 percent of current expenses and debt service is even much less, if has never exceeded 2 percent of yearly expenditure yet. The low share of debt service is due to the fact that the budget raised credits for the financing of deficits with mostly 3–5 year terms at favourable interest rates (2–5 percent) in the 1970s.

With external sources of financing having become more limited and expensive, also the domestic credit market had to keep face. The budget may make use at present only of sources of smaller value and at higher rates of interest (the interest rate of credits granted by the issuing bank is, for example, 12 percent at present). Therefore, in the early 1980s reduction of deficits has already become a real issue of budgetary debt policy. Parallel to this the requirement and necessity of ensuring external equilibrium have arisen as another factor forming views on budgetary equilibrium. Considering the problem in the complex system of relationships of financial processes this means that we may not reckon with external sources completing incomes produced at home. What is more, the financing of

debt service obligations is only possible in the Hungarian balance of payments — taking the scarcity of external credits into consideration — if even the domestic use of a part of sources produced in a given year is given up, that is, an active balance of foreign trade has to be realized. All this requires that income utilization by domestic income-owners, be restricted and the consequences ought to be enforced in budgetary policy (this will also be dealt with later on).

The national economic role of the budget

An interpretation of the role of the budget according to its functions in society and in the organization of the economy is rather widely spread in Hungarian economic literature. [6] Thus, the *economic* function of the budget is intervention in producing activities in the interest of planned economic control and management. Through the *social* function the state realizes social policy and living standards objectives. The function resulting from *public (executive) power* means the fulfilling of classical fiscal tasks: satisfaction of state administration requirements, as well as of those connected with the security of public and state order and of other social needs (e. g. scientific research).

The socialist state, too, has a choice — under given economic policy limitations — as regards the degree of centralization in fulfilling socio-economic functions and the extent to which it makes use of income of other income-owners (economic sphere and the population) for the realization of the deriving tasks.

The budget is in a state of equilibrium if centralized incomes and the *final* income utilization of the state coincide. The distribution of incomes and functions aimed at the realization of economic policy materializing in national economic plans is implemented by means of monetary regulation taken in a broad sense (price, currency, credit, rate of interest) and of fiscal regulation.

The fulfilment of functions and the distribution of incomes among income owners (redistribution) required for their fulfilment largely depend on the extent of direct production management, indirect influencing (supporting) and the social policy and welfare roles the socialist state undertakes.

In the (directive) system of economic control and management based on plan-instructions — which do exist in most socialist countries even at present — the national economic plan determines also economic functions mostly as state tasks beside social and public (executive) power functions. Their realization is provided for through direct orders and the system of plan targets. To this end the state centralizes a decisive part of incomes formed in the economic sphere by means of regulations either directly or indirectly, and finances the bulk of plan targets with budgetary allocations to those realizing these targets. Under such circumstances the economic sphere disposes of independent incomes to a relatively small extent, since the development of the economy is a task of the state even in details.

In the centralized control and management system the state determines its social function in such a broad sense that it practically also takes upon itself the major part of satisfying demands of the population and, accordingly, narrows down the income of the population left at their free disposition.

In the established practice employees obtain practically "net" wages. Since they pay no income tax, furthermore, owing to the order of magnitude of free social benefits as well as to prices of basic commodities kept low with state subsidies, wages serve as a source of the reproduction of labour power only partly. The difference will be accounted in relations between enterprises and the budget. This creates an image of "cheap" labour whose negative consequences are well known, since this brings about in reality a wrong combination of resources, and this apparent cheapness results in wasting live labour and the development of unfavourable structures. And, from the viewpoint of the entire economy, it furthers the utilization of the "most expensive" labour precisely owing to these harmful effects.

Anyway, in such a centralized system of social and economic functions strict budget equilibrium is a basic requirement, since the state may not rely on other income owners — with incomes to be saved practically missing — and arising deficits may be financed from external sources at most.

In socialist planned economy controlled through a regulated and controlled market the state may decentralize a certain part of its tasks other than functions resulting from its public (executive) power.

In this system the question of budgetary equilibrium is much more complicated. Not only because for its evaluation also positions of income owners outside the budget have to be taken into consideration, but mainly because behind income positions also directions of decisions and intentions, i.e. social and political interest relations should be seen and treated.

Major factors influencing budgetary policy*

For the necessary and possible extent of harmonizing the distribution of incomes and tasks no unambiguous prescription can be given. Proportions of such distribution may be determined only by an analysis of management conditions, economic policy, regulatory mechanisms in force and, last but not least, of income producing ability at macro-level, i.e. of the complicated system of relations of economic growth.

There is a relatively smaller demand for income centralization under conditions of dynamic growth with favourable external market terms and a balanced financial situation at least in the average of several years. Then overall propensity (of enterprises and the

*From the viewpoint of our topic by budgetary policy only principles declared or realized in connection with the harmonization of government revenues and tasks should be meant in a narrow sense.

population) to save is stronger and this allows the regrouping of incomes through credits, even in favour of the budget.

If savings are formed voluntarily, then their temporary regrouping (i.e. their use as credit source) will not bring about disequilibrium among income owners, but will promote precisely the realizations of end use.

There is another situation if the state gives up its function only nominally, but in reality it exercises them through formal or informal central decisions, i.e. it does not dispose of incomes, but still wishes to determine their utilization. For example, because free disposition of incomes would evoke such processes which would not correspond to central concepts*

- either because these intentions and resolutions on the spending of money are partly or wholly wrong and economic units recognize the error only with a delay;
- or, because no adequate regulation could be developed for good economic policy resolutions, but the fast correction of wrong processes is an economic policy interest;
- or because conditions have changed and new economic policy resolutions should be realized.

In such a situation, if the state spends more than budgetary revenues, then with given prices other income holders may not spend a part of their money: they will be forced to save. Forced saving concealing the lack of equilibrium is possible also if — owing to wrong economic decisions — a part of the output or the structure of production or sales does not correspond to demand (including also foreign demand) and superfluous stocks and/or capacities accumulate.

However, usually none of the above problems can be solved automatically, by means of forced saving, because income holders do their best in order to spend their money by right of "free" disposition and thus a shortage psychosis will arise and a rise in price level begins. Then the state is forced to restrict spending even at the price of modifying the rules, either by increasing centralization or by inducing to artificial saving (by means of centrally freezing possibilities of spending certain incomes, e.g. through increasing obligatory reserve funds) or by central price increases (e.g. by elimination of consumer price subsidies or by increasing turnover taxes). If external sources can be abundantly drawn in, this restriction will not be successful up to the limit of credit worthiness of the economic sphere, since under the cover of external sources income holders will all the same spend their money by raising credit.

It may be stated that examples for any of these characteristic situations may be found in the history of Hungarian economy until 1980, and other similar international examples can surely be analyzed as well. These various factors appeared in Hungary mostly not separately, but simultaneously, strengthening or cancelling each other. Unfavourable effects and concerns are well known: adjustment to changed world market

*Such phenomena may be met not only in socialist, but more and more often also in capitalist states.

conditions was slow, accumulated debts could only be repaid with a much stricter and more restrictive domestic financial policy.

In the unfavourable situation developed in the early 1980s, the worsening external market conditions, the pressure of debt service, and the growth slowed down because of them (but also in connection with the wrong structure), required new proportions in Hungary in the distribution of functions among income holders and of incomes. When determining new proportions the following constraints – partly contradicting each other – had to be taken into consideration;

- The state will always have considerable commitments (investment projects in process), the elemental need of developing infrastructure, social policy tasks, no matter how much its functions are narrowed down, and this determines a minimum of income centralization.

- External commitments of the national economy are given for whose meeting export surpluses must be regularly achieved and this is occasionally accompanied by deteriorating terms of trade owing to external recession and limited development possibilities. Thus also such incomes are formed which are not covered by commodities to be purchased at home. These incomes should be tied up, too.

- The interestedness of income owners should be ensured; thus the government should refrain from exaggerated income centralization.

- Incomes to be distributed are less from the very beginning, since growth has slowed down because of limited credit raising possibilities from abroad, and in lack of investment possibilities, as well as in fields affected by recession in order to avoid losses.

All this involves problems for economic control and management that has to solve tasks with contradictory effects on each other. Thus, for example, income required for financing state tasks, and the necessity of tying up incomes not covered by goods at home represent such a share within smaller sources to be spent on domestic use which may hardly be reconciled with the claim (at least at real value) that an appropriate income increment be ensured for the economic sphere – but also for the population. Methods of import restrictions reported also to GATT require stricter central control which partly works against the decentralization process of decision-making rights.

Of course, there is no unambiguous case of any single solution because of the complicatedness of economic relations. Such a combination of possible tools is required that will accelerate the adjustment process of Hungarian economy and the increase of its efficiency and income producing ability. A purposeful realization of economic reform has been going on in the spirit of this recognition since 1978 which creates the operating conditions of a planned and regulated market step by step. In the course of further development the most important endeavour is to establish such price and financial relations and regulators which transmit market relations toward subjects of the economy without any distortion.

Hungary's accession to international monetary institutions (IMF, IBRD) does also largely promote this process and, simultaneously, has an impact on Hungarian budgetary policy, too. Financial projects financed by these institutions are also aimed at better

short- and medium-term adjustment, i.e. at improving the balance of payments and reducing foreign debts. These projects are connected with curbing domestic consumption and achieving a surplus in the balance of trade. They are promoted by the strict regulation of domestic demand and a powerful stimulation of export. In this situation the starting point of budgetary policy is that the *development of budgetary balance should follow the balance of trade surplus as a trend*, since a growing saving propensity may only be reckoned with to a limited extent on the part of either the enterprises or the population. Namely, this is a precondition for that the inflationary pressure should not grow on the domestic market either in a concealed or in an open form. This means that restriction of domestic demand connected with improvement of external equilibrium is realized largely through the budget. Although we know that the regulation of purchasing power should also be promoted, at least partly, with monetary tools, the monetary sphere is, however, not developed enough in Hungary for our being able to safely rely on the self-control of other income holders, on the increase of saving propensity. The issuing of credit is based on plans and has been of such a limited extent already for years that it practically does not enable any further moderation of demand.

A considerable improvement of the balance of the budget allows an accelerated repayment of previous budgetary debts and the accumulation of circulating funds by the budget. In addition, aimed at the draining of purchasing power the Hungarian government decided on the introduction of new monetary instruments of fiscal character: a Credit Coverage Fund and an Intervention Fund were established from taxes imposed on development funds of the enterprises. These funds ensure the cover for development expenses of the state and for the "adjustment" support of enterprises getting into trouble. These funds may be regarded as of "business cycle" character since their sources result from strict demand control, while in the case of a balance of trade in equilibrium and with an increasing weight of the regulation of purchasing power developing in the monetary sphere they will be naturally exhausting in the future.

A simple way of improving budgetary equilibrium is to increase revenues and to reduce expenditure. (Governments usually promise to reduce expenses, but in reality they are increasing their revenues by imposing new taxes, a well-known economic paper wrote with some irony.) The problem is more complicated than that in Hungary, because the budget also implements a large-scale redistribution of incomes owing to the aforementioned previous powerful centralization of social and economic functions. Therefore, improvement of equilibrium may and should be set as an aim as the final result of a process where the harmonization of state tasks and revenues is realized simultaneously with a moderation of redistribution of incomes. Major trends of this are the following:

1. The economic function of the budget should be narrowed down in the sphere of current production. This requires a powerful reduction of production subsidies (from this viewpoint agriculture is in an exceptional situation — as everywhere in the world). This does not mean, of course, that the state would renounce of its role in structural policy. What is more, this rôle should be strengthened and, therefore, the "capital expenditure" of the budget should be increased in the future (allocation of state capital).

2. In the fulfilment of social functions the state will have the greatest tasks in the future as well. However, while the social policy achievements and results ought to be preserved, a greater part should also be given to individuals and collectives in carrying financial burdens in proportion to their incomes. For this first of all the social policy system should be cleared from such elements as, for example, price subsidies built into the now prevailing price system and often supporting the consumption structure of those with high income, occasionally unjustified free allocations or only formal fees; and certain social functions of the enterprises, etc. should be limited. At the same time adequate wage and taxation policy measures should be taken to compensate for all these modifications. Elaboration of all the above plans has already begun with extraordinarily great circumspection and graduality.

3. Exercising the public (executive) power functions has always been a task of the state. Here first of all enforcement of saving and rationality may result in a reduction of budget expenses, a part of which can be reduction of the administrative control apparatus parallel with more independent economic activity.

In summary, we can say that our intention is to reduce the role of fiscal instruments in the redistribution of incomes and their subsequent correction, while a wider scope should be given to price and exchange rate policy as well as to monetary tools. In the next years a transformation of the Hungarian budget is envisaged. Aimed at the development of local independence and in harmony with the basic principles of economic policy new solutions are sought after for establishing adequate decentralized budgets of local authorities and regulating their connections with the central budget. Parallel to this, by determining the expedient scope of state tasks we wish to make the system of various funds attached to the central budget simpler and easier to survey. In the interest of a realistic capital supply of enterprises and of easing the burdens imposed on the banking sphere the share of capital expenditure of the budget will be increased. Within the monetary sphere changes are envisaged in interest rate policy and the capital flow between enterprises, bonds have been issued and, among others things, possibilities of developing a socialist variant of commercial credit are investigated. Of course, it is also a precondition that there should be income available that may move within the monetary sphere. We do not think, therefore, that we should only make arrangements for the repayment of debts for ever. Economies similarly small and as open as ours may get along only if they adequately participate in the international division of labour. Now, with the strictness concomitant with the repayment of debts we have to simultaneously evoke the adjustment through which later on new debts may be undertaken again in order to lay the foundations of future development.

The essence of Hungarian debt policy is, therefore, to undertake state tasks as well as to harmonize external and domestic resources. This is also expressed by the share of yearly budgetary debt service, which we wish to keep at a low level, because we do not want to determine the budget of generations following us. From the literature on budgetary problems also such a standpoint is known that accepts over-expenditure, the accumulation of state debts as justified, referring to higher future returns developing

because of direct or external effects. The lessons of past experience suggest that larger future income may only be achieved if the budget finances with its later over-expenditure not consumption but research and development taken in a broad sense.

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ЗАДОЛЖЕННОСТЬ СОЦИАЛИСТИЧЕСКОГО ГОСУДАРСТВА

П. МЕДДЕШИ

Под политикой задолженности (политикой в области задолженности) автор подразумевает политику бюджетного балансирования (выбор пассивного, активного или нулевого сальдо госбюджета). На основе в первую очередь венгерского опыта, он констатирует, что сбалансированность бюджета не обязательно является показателем гармоничного развития экономики: суффицит также может скрывать диспропорции, а при дефиците также возможна динамичная, сбалансированная хозяйственная деятельность.

С 1968 г. для венгерского бюджета характерен дефицит. Появление дефицита — это следствие более последовательного проявления товарно-денежных отношений, вскрывшего наличие в экономике диспропорций. В принципе бюджет находится в равновесии тогда, когда централизованные доходы государства и окончательное использование доходов совпадают. На практике это зависит от того, в какой степени государство децентрализует свои различные социально-экономические функции и в какой степени использует для выполнения своих функций доходы других собственников. При директивно-плановой системе управления экономикой выполнение этих функций большей частью ложится на государство и, соответственно, централизация доходов является почти полной. При такой системе строгая сбалансированность бюджета является важным и существенным требованием, ведь государство не может опираться на сбережения других собственников доходов и может финансировать дефицит лишь из внешних источников. В социалистической плановой экономике, управляемой через посредство регулируемого и контролируемого рынка, социально-экономические функции государства большей частью децентрализованы и, соответственно, иные пропорции складываются в использовании доходов. При такой системе сбалансированность госбюджета зависит от согласования распределения доходов и задач, а при оценке его сальдо (суффицит, равновесие, дефицит) наряду с положением остальных собственников доходов необходимо учитывать также и направления решений, намерений, то-есть соотношения общественно-политических интересов.

До начала 80-х годов согласование функций и доходов в Венгрии постепенно развивалось под влиянием временами менявшихся и зачастую оказывавших взаимодополняющее или противоположное воздействие факторов в направлении децентрализации задач. Однако иссякание и вздорожание внешних источников в последнее время достигло такой степени, что требует не только сокращения дефицита из-за уменьшения предоставляемых бюджету кредитов и повышения их процентных ставок, но и строгого ограничения внутреннего спроса. Выполнение этой задачи из-за особенностей венгерской финансовой системы большей частью ложится на госбюджет. Для достижения этого необходима такая комбинация возможных средств в бюджетной политике, которая усилила бы приспособляемость, эффективность и способность к производству доходов венгерской экономики. Целенаправленное развертывание хозяйственной реформы с 1978 г. служит также созданию условий для функционирования планируемого и регулируемого рынка и правильного отражения товарно-денежными отношениями изменяющихся условий хозяйственной деятельности.

THE SECOND WAVE OF THE ECONOMIC MECHANISM DEBATE AND THE 1968 REFORM IN HUNGARY

L. SZAMUELY

The paper examines from the aspect of the history of economic thought how the revision of the ideas of the directive planning system took place and those of planned regulated market economy were worked out in Hungary in the mid-sixties. It attempts to sum up in what respects the 1968 reform conception implies a forward step, an opening with lasting effects as against earlier reform ideas and compared with reforms attempted in other socialist countries, and also to identify the weak points, deficiencies and inconsistencies of the reform conception of the sixties.

Efforts at rationalizing the system of directive planning (1957-1963)

In an earlier paper [1] I surveyed how the scrutiny of the practical functioning of the system of directive planning according to the Soviet pattern had started in Hungary around 1954, then its critique, and what kind of alternative proposals had been formulated by Hungarian economists. The final conclusion was drawn from the survey of the first great wave of the debate on the economic mechanism in 1954-1957 that the Hungarian reformers wished to carry out such a rationalization of the then known only model of the planned economy within the framework of which the complete and smooth realization of centrally elaborated plans would be attained, possibly without a formal break-down of plans, by regulating the interest of enterprises in performance. As part of such ideas the *normative* character of regulators was still relegated to the background, i.e. the idea that enterprises ought to be allowed to work out the economic and competitive structure of production for themselves, guided only by criteria of economic efficiency. In fact, it was the other way round: a centrally conceived rational structure of production was to be achieved mainly (but not exclusively) by creating income incentives for enterprises. Thus, abandoning the system of directive planning would not have implied a simultaneous shift to a regulated market economy. In the summer of 1957, however, this kind of reform activity was interrupted. The problem of comprehensive economic reform was shelved for international political and ideological reasons.

Thus, in 1956-1957 even a shift away from the system of directive planning did not succeed, not to mention shifting to a regulated market economy. The nature and objectives of economic research in the 5-6 years following the abortive attempt at

reform were characterized by efforts at rationalizing the system of directive planning which had not ceased but had only become lost in the troubles between October-December 1956. Efforts were moving along several tracks.

The first was to bridge over the functional deficiencies of the system of directive planning with the aid of reorganizations, changing the size of enterprises and their organizational framework. This approach, called in my earlier paper the organizational approach, was revived in Hungary in the late fifties (not independent of the reorganization campaigns then general in the other socialist countries). Beginning with 1958, this manifested itself, almost continuously, in the amalgamation of state-owned companies, establishing monopolistic large enterprises, finally taking wing in the industrial reorganization of 1962–1964. Although this process has not been overmuch discussed by Hungarian economists, it is an interesting feature of the few relevant theoretical writings that their authors conceived the amalgamation of industrial enterprises essentially as a substitute for the absent reform. (Articles by Sándor Balázs and György Varga in 1959 [2], and Ottó Gadó in 1963 [3] are outstanding contributions.) They believed that larger enterprises would manage their affairs with greater autonomy, the number and details of central prescriptions could then be reduced, and jerky inter-enterprise deliveries could be replaced by rational work organization within the few large firms. In reality — as if to prove that the road to hell is paved with good intentions — a very big obstacle to an efficient and competitive economic structure in Hungary is the overconcentrated enterprise structure that emerged from the amalgamations of those years — overconcentrated even in comparison to the other socialist countries.

The other was analysis of the various ways of material stimulation and financial enterprise incentives — somewhat modified after 1956 — and their more active use in implementing the centrally established plan tasks. The many, in several respects pioneering, investigations into profits, incentives etc. at the newly established large farms (state farms and cooperatives) are part of this trend.

A third track was the effort at improving the quality of central planning with the aid of modern mathematical methods and computers. In a sense, the late fifties and the first half of the sixties may be called “the golden age” of mathematical economics in Hungary, but not on account of any widespread knowledge of mathematical procedures and much less so because of the available computer capacity. It was a “golden age” in respect of the hopes and illusions attached to the use of mathematical procedures. This happened voluntarily and sincerely, but also under duress. It seemed that the possibility of a comprehensive change in the system of management had been put off for a long time, a considerable number of economists therefore expected an improvement in the efficiency of social production, and a solution of economic evils and deficiencies, from linear programming, input-output analysis, econometric modelling and other mathematical procedures — at the same time essentially maintaining social and economic relations unchanged. There was good reason why the most heated debates of this period were — not only in Hungary but in the other East-European countries as well — on

methodological subjects, more precisely on the principles and methods of economic efficiency computations which then ramified in various directions: efficiency of foreign trade, of investment, of technological development, etc.

It was logical and necessary, however, that both these ways of rationalizing the system of directive planning should run up against the same problem: to wit, the instruments and measures used in economic life, i.e. the problem of *prices*. Therefore, in the final analysis, the whole period may be justly called *the period of price debates*. It seemed that the difficulties of both central planning and material stimulation could be averted; not only the troubles in the rational operation of the economy and in accurate accounting and rational allocation, but even factors hindering cooperation among the CMEA countries would disappear if the price system correctly reflected and expressed both inputs and the results of efforts, making possible an undistorted comparison of the two. Thus, in their opinion, the objective was to create a system in which prices would serve economic clear thinking, that is, they would exactly express the social cost (i.e. value) of products. Thus the debate was not about the role and function of prices in regulating production since this function had to be fulfilled exclusively by the central plans compiled on a physical basis, and by the requirements, ("plan targets" for individual enterprises were deriving from them), but about the mode of defining the social cost of products, that is, how the centre of prices – to use the Hungarian technical term – should be worked out, that is, the ideally construed price from which the price authorities of the state may allow actual prices to deflect for various economic policy considerations.

Since up to then the principles and methods of official price formation no doubt had comprised a great many irrational elements and distortions, the debate indeed promoted clarification of the substance and components of social inputs, above all the consideration of the engagement of assets (interest on capital) in price and other calculations, and in its wake the introduction of the charge on assets in 1964. A paper written in 1962 by two fellows of the Institute of Economics, Tamás Nagy and Zsuzsa Esze [4], clearly showed the deficiencies of internationally advanced proposals regarding the formation of producers' prices and explained the price formation patterns relying on the Marxian price of production which were called the "multi-channel" price type by Hungarian economists. (At that time the Hungarian experts officially proposed to apply this price formation principle for establishing what was called the own price base of intra-CMEA foreign trade prices independent of world market prices.) (Cf. [5].) But let me emphasize that, originally, the price debate did not intend to change the role of prices in the operation of the socialist economy, it did not intend a revision of the conditions of management. Tamás Nagy and Zsuzsa Esze indeed openly declared this right at the beginning of their article: "Since the sale and purchase of commodities is transacted at industrial producers' prices among such enterprises which have a common owner, that is the socialist state, these prices cannot play any role in the distribution of national income among the individual members of society." [6] (This was, however, not true in the case of Hungary, not even formally, if we seriously reflect that the system of profit sharing had existed since 1957 also in state-owned enterprises. Thus, at least in principle, producers'

prices might have indeed influenced income distribution among workers of individual state enterprises.) But the substance was the orienting role of prices in the economic decision making by central agencies, that is, that prices should fulfil the role of instrument of accounting and planning.

But even this restricted and subordinated scope comprised an internal contradiction which indeed expressed the highly contradictory nature of the whole economic accounting system (*khozraschot*). If, that is, central economy-wide planning sets out from satisfying physical needs, if it wishes to secure resources and capacities expressed in physical terms for the attainment of objectives also expressed in physical terms, then efficiency as an objective can only be of secondary importance from the outset, since use values, as results and as inputs, cannot be compared or confronted in physical units of measurement. The macroeconomic degree of efficiency of a given development project cannot be stated. The value aspect of decisions taken in physical terms will show an efficiency different from the computations relying exclusively on physical-technological parameters — whatever kind of price system is applied. Although the decision is binding on the national economy and the enterprise, the material (financial) costs related to implementation ought to be carried, in principle, by the enterprise (since this is the gist of economic accounting) or, in the final analysis — as is usually the case — by the whole economy, while the cumulating discrepancies lead to chronic or acute shortages that is to a disturbance of internal and external equilibrium.

Therefore, even the debates about economic efficiency conducted in abstract terms, and the ideas materializing about the real size of social inputs in the price debate have led to the emergence of a kind of — not infrequently abstract and speculative — efficiency criteria, in the last resort to such an approach to efficiency (and not only in Hungary but also in other socialist countries) which challenged the order and mode, and then also the objective and contents of decision making itself. That is, the necessity of a comprehensive revision of the whole system of control and management, of the economic mechanism again became urgent.

This process took place with extreme rapidity in Hungary in the early sixties.

Revival of the reform idea

Already in the very early sixties there was a Hungarian author who emphasized in two of his papers [7, 8] the need for a comprehensive approach to production relations in the socialist economy (including their development, even their comprehensive revision and the alternative of choosing among concrete systems of management). But, since under the then prevailing conditions he could only explain his ideas in a philosophically abstract manner, one might say in Aesopian language, his writing had no echo worth of mentioning.

Hardly two years later, not merely an echo was produced, but a real tempest thanks

to a famous article by Tibor Liska: ("Critique and conception") [9]. It was terse, concrete and outspoken. Although, formally, Liska made a contribution to the price debate, he did not propose some new kind of "price type", but called attention to the irrationality of price types established by authority, that is, of the prices debate itself. Every price formation pattern had indeed set out from the domestic inputs (costs), and considered these as "socially necessary" in an economy the existence and development of which depends on foreign trade, competitiveness on the world market of its products. Hungarian economic policy — at least as regards its intentions and declarations — had discarded the self-destructive concept of autarkic economic development already in the Party resolution of June, 1953, and the programme of the first Imre Nagy government. (It is a different matter that the economic policy consequences of CMEA-autarkic development, of giving priority to import substitution still place a grave burden on a Hungarian economic policy that searches for a new path of economic growth.) In its price policy, however, it invariably supported — as was first shown by Tibor Liska — autarkic development and thus protected and conserved backwardness. Therefore, Liska demanded a revision of the whole approach within the framework of a general reform of the mechanism.

In his arguments and suggestions Liska repeated on the one hand the reform ideas of the fifties concerning the replacement of the system of directive planning by one relying on a regulated market economy. On the other hand, as regards the principles and objectives of reform, he went well beyond them, indeed, in several respects he even went beyond the reform ideas implemented or advocated in the second half of the sixties. Therefore, his paper proved a multiple stumbling block in those times, but it has not lost its validity and timeliness even after twenty years (and a more or less implemented reform).

What was so bold and innovative in his — then unheard of — proposals and critique?

1. No one before Liska argued so categorically in Hungary (perhaps not even in the international economic literature) that production relations are of a market character also in a socialist society, nor had anyone said it that loud and clear that "the socialist economy is not an economy directly producing for needs but one producing for the market." 2. Similarly, there is hardly any other such consistent explanation (in either Hungarian or the international writings of those times) of the fact that domestic production is not separated from foreign sales by a Chinese Wall and that the socialist economy has to be developed as guided by the world market and not in seclusion behind national frontiers, or, else it would unavoidably fall behind in modernization, in technological progress, in the level of social productivity. 3. World market orientation also has to determine the internal financial, price formation and other value mechanisms, also including the need for a convertible currency. (To the best of my knowledge, it was Liska again who first raised this problem in writing in Hungary.) 4. The reform has to produce a consistent model of market economy (though the term was not used by Liska), in which administrative prices would be replaced by flexible prices adjusting to supply and demand; world market prices would not mean a new calculative (fictitious) "price

base" but would actually assert themselves on the domestic market. Though not expounded in detail, one may conclude from several references that the author also wanted to subordinate investment activity, that is the allocation of investment resources, to maximising profits, and to long-term efficiency criteria, introducing competition among firms for the acquisition of capital resources. Thus, his approach markedly differed from both ideas that were not realized in the fifties and from those implemented in the sixties. It was much more closely related to ideas that emerged 10–20 years later.

Of course there are several controversial or unsatisfactorily explained, insufficiently argued ideas, socio-philosophical and economic theories in Liska's writing: I am thinking here of such as the introduction of a personal money allowance due to every citizen (this proposal resembles the concept of a "negative tax" suggested somewhat later in the West), or the discussion on the problem whether the market economy ought to be more developed under socialism or in modern capitalism ("commodity having a more pronounced commodity character," "money having a more pronounced money character" etc.). Yet the storm and the attitudes uniformly manifesting themselves in official declarations, refuting, denouncing and attaching "labels" to the author were not elicited by his "eccentricity", but by the positive message of his writings. This message was so much opposed to the official economic policy and ideological course of the preceding six to seven years that the real question to be answered is how and why this paper could be published at all. One thing is certain: its publication had sound reasons, it was the result not of an editorial whim wishing to create a stir, but of prompting from a higher level after long deliberation.* Presumably, the article by Liska was intended to play the role of the proverbial swallow that does not create a summer, yet indicates a change of seasons, the external and internal conditions for which were certainly ripening in 1963.

As regards the *external* conditions:

In the early sixties it was in the first place the dominating ideological line of the international Communist movement that underwent a change. The decisive event in this respect was the 22nd Congress of the CPSU, held in October, 1961, which declared itself as agreeing with the guidelines of the 20th Congress, publicly disclosing and condemning the crimes, distortions and degenerations of the Stalinist period, and, simultaneously, made obvious the break with the ideological and political line of Mao Zedong, who aimed

*As far as I can remember, (I was a member of the editorial staff of *Közgazdasági Szemle* at the time) Liska's manuscript was forwarded to us by another less specialized journal to which Liska had first sent it, with the explanation that *Közgazdasági Szemle* was "more competent" to judge its contents and its readers better suited to evaluate such ideas "appropriately". Then the manuscript was discussed by the board of editors of the journal. Discussion of manuscripts by the full board only happened rarely, and an odd decision was taken, included in a footnote attached to the article that the article was published in spite of the fact that the editorial board did not agree with it. This decision was strange because the journal usually did not publish articles of which the editorial board did not approve. (There were numerous examples.) In addition, in the same issue of the periodical there appeared articles by prominent members of the board of editors, that aimed to refute Liska's views. [10, 11].

to play the role of heir to Stalin in the international labour movement. This again provided an opportunity for open action against dogmatic and sectarian ideology.

One of the results of this process was the rearrangement of inter-party relations with Yugoslavia, after the acute ideological polemics of the period between 1957–1961. From the viewpoint of our subject this entailed the important positive development that an objective discussion of the experience with the operation of the Yugoslav economic mechanism again become *de rigueur* in the East-European countries in the mid-sixties – with the exception of Albania.

In foreign policy, growing international tension related to the building of the Berlin Wall in August, 1961 and to the Cuban missile crisis in October, 1962, was gradually replaced, and for a longer period, by a more relaxed and orderly system of relations between the two opposed military blocks. (It was e.g. in 1963 that – following the severe draught of that year – the Soviet Union first bought large quantities of grain from the US, something for which there had been no precedent.)

Important changes started also in the domestic economic lives of the East-European socialist countries. The slowdown in earlier fast quantitative growth, its exhaustion in some countries (Czechoslovakia), the insistent need for quality and efficiency put the revision of the existing economic mechanism on the agenda in several countries. The debate about the mechanism started – or restarted in some countries after a long pause. The first push was given by an article written by Professor *Lieberman* of Kharkov, published by *Pravda*, on September 9, 1962 [12] which created an unprecedented echo at home and abroad.* The discussion concerning the reform started in the Soviet Union, several experiments were initiated, and all that led to the reform of economic control decided on in September, 1965. The *Lieberman* article made a particularly powerful and prompt impact in the GDR. After sympathetic review articles published in October and November of 1962, at the 6th Congress of the Socialist Unity Party of Germany, on January 15th, 1963, Walter *Ulbricht*, then First Secretary and Head of State announced the plan of an economic reform. Half a year later, in July, 1963, the NÖS, the New Economic System was already put into effect by order of the Council of Ministers. Thus, the GDR was first among the socialist countries to introduce an economic reform. Preparations for the Czechoslovak reform started at about the same time.

In Hungary the *internal* condition at the end of 1963 showed, beside successes in political and economic consolidation, cumulating internal and external disequilibria, and the mere beginnings of the relaxation of the cramped ideological situation that had set in 1958.

The achievements in political consolidation were the most conspicuous. The success of the policy of consensus, proclaimed right after 1956, was crowned by such a socialist reorganization of agriculture which – for the first time in the history of socialist economies – did not entail a drop in agricultural output. True, this required far from insignificant – and unplanned – state support, and the growth in production only

*For a contemporary discussion and comments in Hungary see [13, 14].

occurred with delays. (On the other hand, also thanks to the later reform, the achievements of Hungarian socialist agriculture proved to be unique in the socialist world.) A condition of the consistent policy of consensus was a final break with the past — more exactly with even the faintest possibility of a return of the past, that is of the Rákosi-line. The seal was put on this — mostly already with symbolic significance — by the resolution taken by the CC of the HSWP on August 14–16, 1962 concerning the Rákosi–Gerő group, and their expulsion from the Party. A sign of political consolidation, serving at the same time national appeasement, was the general amnesty of March, 1963, after which in Hungary there were practically no political prisoners. The resolution of the 8th Party Congress (November 20–24, 1962) was part of the same line. It stated that: “in the judgement of the people, in filling all posts and functions, competence and ability are decisive today, in addition to loyalty to the socialist system. — The evolution of our uniform socialist society and the socialist progress of our education system allow and, at the same time, demand that in admission to schools the knowledge, ability, political and moral behaviour of candidates should be the standard. It is no longer necessary to classify students in terms of their social origin.” [15]

In the economic field, successes were not so unambiguous. True, in 1961–1964 Hungary succeeded in maintaining the relatively rapid growth of national income, at a rate of 5–6 percent p.a., even while carrying out the socialist reorganization of agriculture, but this could only take place with an increasing cumulation of internal and external disequilibria. The fast growth occurred in the traditional manner — with more investment and more labour drawn in — in the spirit and using the methods of the traditional directive planning system that shows a preference for quantitative growth. In consequence — and similarly traditionally — improvement in productivity and efficiency were lagging behind plan targets every year. This could only be counterbalanced by withdrawing resources from other fields — the infrastructure, the improvement in living conditions — and, of course, by resorting to external resources, by increasing indebtedness to Western banks.* In Hungary — and similarly in other socialist countries — it became ever clearer, at least to the top leadership, that the ways of economic development followed up to then, and the mode of economic control and management that had continued after 1956, would have to be changed.

It is, however, a particular feature of Hungary's historical development that the changes in international conditions and the pressing need for a revision of economic control and management, had so to speak no trace in, and remained unnoticed by, the ideological line that became established in 1957, by the ideological and propaganda sphere and the apparatus directing them. Nothing showed this lag, this discrepancy better than the ideological conference convened in December, 1963 (!) to urge Hungarian economists to preserve the “ideal purity” of obsolete views and dogmas. Professor László

*A brief but illustrative summary of the sharpening imbalances — critical accumulation of unsaleable products, increasing external indebtedness, and within the latter, the troubles related to the amortization of short-term commercial credits, which almost caused a liquidity crisis — can be found in a recent book by Iván T. Berend [16].

Háy, the man appointed to give the key note admonished the great number of economists convened from the most diverse areas of the economy and scholarship with unconcealed frankness right at the start: "The struggle of 1957–1958 introduced politics and ideology into viewpoints brought to bear in the judgement of scholarly works . . . our message of those days has not lost any of its validity, it also has significance for the future. On the other hand, one of the greatest dangers is that politics and ideology are artificially eliminated from economics." [17] He made the accusation of "unpolitical behaviour", "neglect of partisanship", of "kow-towing" before bourgeois economics precisely against the two most successful fields of Hungarian economics, the use of mathematical methods and economic empiricism, the investigation of the real functioning of economy.

But, instead of the proclaimed "ideological offensive", it was first at this conference that the ideological purificators, ignoring the economic, political and international changes, were publicly put on the defensive. It was there that it turned out that the Hungarian political and economic leadership was searching for a way out in a different direction. It was at this conference, convened by the scientific and cultural as well as by the agitprop section of the CC, HSWP, that the chair was occupied by Rezső Nyers, the Secretary to the CC of the Party responsible for economic policy problems, elected a year before. In his presidential opening address Nyers applied quite different accents and urged economists to solve other tasks, and he also passed a different judgement on the situation: "The multitude of practical subjects in economic research is sound. It is a deficiency, however, that practical research seldom leads to theoretical generalization. It is part of the substance of Marxism-Leninism that it is both a tool of scientific cognition and the science of social activity . . . More scientific planning methods must be searched for, together with an improvement of management on national, sectoral and enterprise levels. Simultaneous efforts must be made for increasing the planned character of development, improving the economic mechanism, and developing the economic thinking of workers . . . The Central Committee of the Party is of the opinion that no kind of revelation can be a source of scientific cognition and correct action."*

This idea was continued – and the agitprop conference was turned in a direction opposed to the original intentions of the organizers – by the contributions of Imre Vajda and György Péter. It is worth quoting them at some length, since they indicate why, and for what reasons, the wind had changed and the idea of reforming the economic mechanism had gathered new strength. Professor Imre Vajda criticized László Háy's address because it had not set out from the situation of the Hungarian economy or the problems that had to be solved. He emphasized that Hungarian economics was conducting research in the right direction when it scrutinized first of all the problems of the economic mechanism, trying to carry out modifications and improvements there. In his opinion "the most pressing task of Hungarian economics is to revise and analyse the whole economic mechanism, or a considerable part of it. In the last resort, the phenomena we meet with must indeed have a social cause. One cannot say – to mention

*Quoted in [18].

just one example — that the causes of lagging technological progress are mistakes, such as are due to not careful, conscientious or well founded enough activity of individuals here and there. This is not a satisfactory explanation if the phenomenon is too general . . . Every careful and conscientious economic work in the international literature of socialism points out this phenomenon and, therefore, it is our prime task to explore its roots and causes." Similar problems are raised by the situation of the international division of labour and the objective of increasing the productivity of labour. [19]

György Péter, then President of the Central Statistical Office, set out from the fact that, while the economy was developing in a healthy way, rapidly and successfully, some kind of pathological, abnormal phenomena have appeared. These found expression above all in the accumulation of excess stocks. The product-mix, range of choice and quality of industrial production did not answer needs in all respects. "We all learnt and taught in seminars and courses", he said, "that socialist society is a society where, as against capitalist society, production satisfies needs. And here, it seems it does not satisfy them. On the one hand, we raise credits . . . and on the other, such accumulating stocks are contrary to it, and the two are, unfortunately, not convertible, since if they were, there would be no problem — which is that we produce more of some things than we use." And the cause was, in his opinion, obviously not the unsatisfactory knowledge of workers and technical people, but the fact that given the prevailing form of planning and control, the attention of enterprises was diverted from the final use of the product, work was frequently carried on in the interest of plan fulfilment instead. "I should not like to be misunderstood", Péter said, "and I therefore add that it is my unshakeable and holy conviction that rational central control and planning are part of the idea of socialism. They are integral parts of it. But I am not convinced that the present form is the most perfect possible." He blamed the Hungarian economists for not making a serious attempt at coordinating opinions and establishing a diagnosis concerning these negative phenomena, since "this was a delicate problem, and for a long time it was fashionable to say that the problem did not exist". "It was precisely this task we did not solve", he said, "with which we could have best helped our Party, the Central Committee and the further healthy development of the economy." He agreed with Rezső Nyers that no kind of "revelation" could serve as a basis for economic research. Concerning the partisanship of science he said that "nothing can be more partisan than the exploration of truth". [20] The free spirit of searching for truth must not, therefore, be hindered, but helped, since this contributes to accelerating scientific research and economic progress.

It was characteristic of the fast change in Hungarian economic public opinion that at the end of 1963 there was already no one who would have defended the "official" paper that had started the ball rolling, while there were many critics — in addition to those mentioned. More precisely, one defender of László Háy's paper was still found, none other than Endre Molnár, then deputy head of the agitprop section of the CC, the presumable *spiritus rector* of the conference convened under the aegis of an "ideological offensive". Regarding the central problem under discussion, the necessity of reforming the economic mechanism, raised by so many, he could not do anything better than —

reviving the argumentation of the late fifties — to equate the reformers with the enemies of the socialist social order, although he did it in a much more indirect and milder form than in those days. He set out from the fact that the notion of an economic mechanism was unclear, allowing for several kinds of interpretation and “at times certain very clear theoretical, economic and political ideas and notions are also attached to the various interpretations”. As an example, he quoted Liska’s article published three months before, the main idea of which, in his opinion, was that “socialism is a good thing, but the economic mechanisms of socialism is a bad thing, the whole must be fundamentally revised, that is, quite a new thing has to be devised, and in the creation of this new thing the central problem was that of price revision, which can be solved by adjusting our price system to that of the capitalist world market.” . . . “It should be clear” — Molnár said — “that if we speak about the economic mechanism and attribute to the economic mechanism a sense covering everything, and then say that the whole mechanism, as it is, is wrong, and to be discarded and that a new one, should be created instead, then the formally expressed affirmation of our socialist economic and social system becomes, as a matter of course, quite void of sense.” [21]

But this position argued by Molnár, negating even the justification of raising the problem of a comprehensive reform of the mechanism was then no longer “official” opinion in Hungary, at least not in the economic and political sphere. This became clear at the conference itself, from the closing remarks by Rezső Nyers who made it quite clear that the position of the Party leadership was not one of defending an ideological stance at all costs. As he said, it was indeed necessary to clarify the notion of an economic mechanism lest other questions be discussed under this title. But, in his opinion, this debate was frequently forced, since, while the justification of discussing the mechanism was still being debated, the Party leadership had been regularly discussing it for years and life was going on.

The words of Rezső Nyers revealed, however, not only the intention of rejecting a petrified ideological line, but something more (of which the participants perhaps were not even aware at the time): the start of concrete work on the further development of the economic mechanism. Since then it has already been revealed that Nyers had already in 1963 (that is, prior to the ideological Party conference) created a personal informal consultative body, a “brains trust”, consisting of theoretical and practical experts, at whose meetings the plan of a radical economic reform was already then emerging. [22] Imre Vajda and György Péter were members of this group.

The ideological conference of December, 1963 was the last serious and public attempt at obstructing the economic reform demanded by the Hungarian economy and society on ideological and political grounds instead of discussing the subject on its merits. After it, the actual preparation of the reform started on the initiative and under the direct guidance of the Party leadership. The Committee for the State Economy of the CC of the HSWP passed a resolution in this sense on July 21st, 1964 and this was confirmed by the December, 1964 session of the Central Committee. In the two years that followed a critical evaluation of the functioning economic mechanism had to be prepared and a

comprehensive concept for the modernization of the economic mechanism had to be worked out on this basis. Furthermore, the internal and public debates about the concept to be worked out were already about problems of substance and references to ideology or dogmas were already rarely used as arguments. (The latter type of argumentation re-emerged in the Hungarian scientific and public life only in the early seventies.)

Debates about the conception of the reform to be worked out and its interpretation

As distinct from the literature in the fifties, in the preparation period of the 1968 reform there was relatively little public discussion, and debates in the preparatory and decision making bodies engaged in working out the reform also concentrated mainly on practical problems and questions of detail. It seems that the decision on the conceptual "big" problems was accelerated and relatively facilitated partly by the rich and diversified Hungarian experience of the preceding discussion and partly by the already mentioned favourable development of the international situation.

A decision on the reform itself was taken in two steps. The working panels formed after the December 1964 session of the CC of the HSWP concluded the critical evaluation of the situation, and the basic conception compiled on the basis of their judgement was approved by the November 18–20, 1965 session of the Central Committee. The then approved "Initial guidelines" [23] essentially determined the character and direction of the reform. The second step was the working out of detailed guidelines. This work ended in Spring, 1966 and the final decision was taken by the CC at its May 25–27, 1966 session. Thus, the reform introduced in 1968 had taken final shape already in May 1966. (This is why Hungarian economic writings speak about a 1966 conception, not about one of 1968.)

Although there was no public discussion concerning the basic concept of the reform, decisions on its fundamental nature were certainly not free of arguments in the working panels themselves. The most debated problem that had to be decided already in Summer, 1965, when determining the "Initial guidelines", was whether the Hungarian economic control system should retain the directive form of the planned economy (striving, of course, to reduce the number of central plan indicators, to better coordinate them, to extend the rights of enterprises, to increase personal interests related to quality and efficiency indicators — that is, to proceed similarly to the reforms decided upon or proposed in most of the socialist countries) or should introduce an economic mechanism operating on the basis of a centrally planned and regulated market economy.

Even the three-member secretariat of the Mechanism Committee, whose job it was to prepare a comprehensive proposal, was sharply divided on this major problem. So much so that the chapter on economy-wide planning of the draft "Initial guidelines" comprised two different variants prepared by the secretariat, which contained the above mentioned alternatives. The essential difference was that the first variant considered

direct government instructions — and within that particularly plan instructions — to be exceptions in the control of enterprises, while the second variant considered plan instructions to be the elements of the substance of the control system, that is its integral part, although it also wanted to considerably reduce the scope of indicators, leaving greater scope to commodity and money (market) relations, to economic regulation based on enterprise interests.

Those submitting the first variant consistently pointed out that the second variant was pregnant with internal contradictions. If the direction of the impact of economic regulation relying on market methods (the importance of which was also acknowledged by the second variant) coincided with the main objectives of the economy-wide plan and with the interests of society, then it was superfluous to prescribe obligatory indicators. If, however, there was a difference between the two — and the prescription of some of the indicators, reduced in number, would obviously relate to this case — then the familiar situation would emerge that the central plan instruction demanded something that was contrary to the interest of the enterprise. The solutions by which this contradiction was usually resolved, were only all too familiar in Hungarian and international experience with the system of directive planning. The reforms envisaged were intended precisely to ward off such damage and to improve efficiency. This argument was made its own first by the Mechanism Committee, and later also by the November session of the Central Committee which essentially accepted the first variant as a basis for the "Initial Guidelines", that is, as determining the nature of the Hungarian reform.

However, it is not without interest to mention the sole publication, that appeared after a decision had been taken on the reform, which still took a position markedly differing from the official one regarding the causes, nature and objectives of the reform. What György Sik, at the time a head of department of the National Planning Office had to say deserves attention because similar views became popular in a number of socialist countries in later years. Sik did not negate the troubles and deficiencies of the up to then prevailing practice of the directive planned economy, and fully agreed also with the necessity of comprehensive reform. But he found the cause of deficiencies and mistakes, in the last resort, in the underdeveloped and insufficiently elaborated state of the plan computation procedures used in central planning and in the absence of an adequate mathematical apparatus and computer base. Thus, up to the time that the methodology of central decision making and its technological foundation had attained the desirable level, it was expedient, in his opinion, to trust enterprises with solutions of the tasks that could not be reliably decided centrally, by using economic stimulation, allowing thus for the production regulating role of the law of value in a certain sphere. Since, however, economics had already discovered — according to the author — the mathematical procedures of central decision making, or was rapidly approaching such a point, decentralization and increasing enterprise autonomy, proposed by many during the elaboration of the reform, might prove to be a backward step. The reform was thus "an indispensable and seemingly backward step. . . in the control of the socialist economy. . . which is however capable of providing the foundation for faster economic development,

yet the progress of the methodology of planning – of decision-making – *points in the direction of more efficient centralized decisions.*” [24] Since, according to Sik, the rapid progress in this direction of programming and optimization procedures “has been proven”, this “apparent” backward step in the development problems of the national economy may become a “real” one. “Therefore” (that is, because of scientific progress, and not for ideological reasons, as was said in the fifties – L. Sz.) “we should most definitely resist . . . proposals and positions, however popular they may be . . . which wish to evolve spontaneity and emphasize that enterprise decisions are superior to any other.” [25]

It is superfluous – however tempting it is – to enter into a discussion why the idea that the rational functioning of a socialist economy could be almost perfectly ensured by the automatic control of some kind of super-capacity computer is utopian. Suffice it here to refer to the arguments advanced by Kálmán Szabó and Miklós Mandel in their critique of Sik’s views. [26] The two authors pointed out that the main trouble with this technocratic idea was that it did not reckon with the fact that there are objective production relations in socialism too, that the economic interests of people occupying different positions in production differed, and that for their coordination – in the interest of the greatest possible degree of social effectiveness – indirect control through commodity and money relations was better suited than centrally issued direct instructions. The authors emphasized the three necessarily existing levels of economic decision making – national, enterprise and individual – and correctly pointed out that the shifting of decisions from lower to higher levels was not only superfluous but it could be shown to entail deterioration in efficiency and social losses.

It is greatly to the credit of Szabó and Mandel that, while advocating the expansion of enterprise autonomy (as we know, this is a common feature of the reform proposals in every socialist country), they showed by theoretical arguments how harmful it was, also contradicting the objectives of the reform, if the uniform process of reproduction was torn into two in a way which relegated simple reproduction to the scope of authority of the enterprise, but concentrated decisions on extended reproduction (investment, development) at the higher levels of the economic control hierarchy. (As we know, also the implementation of the Hungarian economic reform of 1968 ran along these lines, as the reasoning of the fifties had done.)

But their paper did not clarify unambiguously (or rather they avoided the problem) what the relationship between macro- and micro-decisions (in their terminology) should be. They established that “the central will aimed at macro-economic interrelations can certainly not be enforced through detailed instructions telling each enterprise what to do”, they also emphasized: “if, however, it is true that macro-economic problems are a particular aggregate of tasks belonging to the scope of enterprises (including also the commodity and money relations between them) then the latter cannot be dismissed from the scope of central regulation in respect of either simple or expanded reproduction.” [27] – Their summing up was: “obviously, such a control system of the planned economy is needed as will provide uniform patterns of movement for the objectively

intertwined processes of simple and expanding reproduction and which will, therefore, establish harmony between the directions and proportions of structural changes at both the national economic and enterprise levels." [28] This did not unambiguously clarify whether abandonment of "breaking down" the central decisions by means of plan instructions and their replacement by indirect regulators only meant a more flexible and thus more effective mode of implementation of central plan decisions, or also the role, function and contents of central decision making (of the plan), the method of working out the national economic optimum, that is, the relationship between the "plan" and the "market" would change.

This problem was formulated with unique clarity in connection with the Hungarian reform by Béla Csikós-Nagy at the beginning of 1966, in a paper of fundamental importance: "Two stages of the Hungarian price debate". As he wrote, the system of directive planning rested on the hypothesis that "the plan is a regulator encompassing every detail, a planned character implies the centrally computable national economic optimum and the mechanism of plan instructions based on it." [29] This view considers the market to be a necessary evil, to be tolerated only in the trade of consumer goods (and even there only transitorily). Initially, as Csikós-Nagy correctly emphasized, the discussion on the reform of the economic mechanism in Hungary wished to prove (and the fifties should be included here), that the implementation of the national economic plan can also be secured by means of basically economic instruments, without resorting to plan instructions. By the mid-sixties this debate was decided in Hungary in that sense. But the idea of generally accepted indirect regulations also started with the hypothesis that a centrally computable national economic optimum objectively exists, and can be realized if enterprises act under the impact of the well established economic regulators and in conformity with them. "This theory considers the market to be essentially a technical transacting mechanism of the central plan, and it therefore sticks to the traditional interpretation of plan and market. It can be predicted" — Csikós-Nagy wrote — "that if the economic reform is implemented in this spirit, operative government interference must be regular. It is quite certain that under the impact of the economic regulatory instruments enterprises cannot act quite as is centrally assumed by the plan (and particularly by its supporting computations)". [30]

Csikós-Nagy also provided another kind of interpretation of the relationship between plan and market, which, indeed, also meant a different view of the reform: "the national economic optimum develops. . . on the basis of regulation by the central plan, but objectively as the final result of actual market processes. It is thus quite possible that when enterprises react on the economic regulatory instruments, they do not reproduce the economy-wide plan in every detail. But they do not do so under the mechanism of plan instructions, either. The plan must, therefore, be revised from time to time in both concrete systems of the planned economy. The essential difference is that under the new economic mechanism it may be assumed that when the market reacts on the plan, the former operates in the direction of central ideas. As a result, it essentially channels the economic processes towards the national economic optimum." [31] Thus, according to

this second view, the market is an indispensable element in the relationship between the plan and the market not only in the realization but also in the determination of the national economic optimum.

Finally, which of the two conceptions of the relationship between plan and market, as outlined by Béla Csikós-Nagy, can be considered as the basis of the reform of the mechanism of 1968? This question can only be answered if we survey the main features of the 1968 reform.

The strong and weak aspects of the 1966 conception and the 1968 reform

If we set out from the text of the "Guidelines" of the reform, passed in May, 1966, [32] the conclusion can be reached that in the course of elaborating the reform this problem had been left open. At least the text contains formulations which allow for both kinds of interpretation of a planned economy without plan instructions.

If, however, we set out from the history of the operation of the economic mechanism over more than one and a half decades since the reform of 1968, the conclusion may be reached that in practice the first reform conception has been realized. That is, the system of plan instructions has been replaced by a huge system of economic regulatory instruments which can actually secure the implementation of the economy-wide plans, but the regulation of market relations through indirect methods is also coupled with regular and operative interferences by the central economic control agencies.

Has then Csikós-Nagy's forecast come true, that, if the market is considered as a technical transacting mechanism of the central plan, then operative government interference will become regular? Yes, and no. On the one hand, the existence of the complicated and intricate regulatory system, which, in addition, is frequently (regularly, and also *ad hoc*) revised and changed, and which is complemented by various formal and informal channels of operative interference by the control agencies, seems to justify an affirmative answer. But, on the other hand, the market should certainly not be considered merely a technical transacting mechanism of the central plan in Hungary, if only because the central planning agencies in Hungary no longer draw up an economy-wide plan that is detailed in the conventional manner. The extensive and direct interference of the state in the activities of enterprises is justified by other causes, and these usually have nothing to do with the implementation of the original central plan targets. These causes are of a different kind, they would require a longer exposition. At any rate, they entitle us to answer Csikós-Nagy's forecast in the negative as well.

The operation of the Hungarian economic mechanism over more than fifteen years appears to prove in general that in Hungary a third, new kind (if you like, model) of the socialist planned economy has come about beside the hitherto known Soviet- and Yugoslav-type. This has come about as a result partly of intended action, but also of

deliberately entered compromises, of the mistaken neglect of essential factors, and of unforeseen and unforeseeable international and domestic developments.

Let us examine that part of these developments which can be traced back to deliberately undertaken or neglected objectives of the 1966 reform conception. Let us start with those which may be justly considered – and are internationally acknowledged – as achievements, innovations, and positive results of the 1968 reform. Let me note in advance that *it is these positive results of the reform that determine in their totality, and even retrospectively, the nature of the great step taken in 1968*, even if, understandably, since then and particularly in our days – precisely in the interest of further progress – it is the deficiencies of the reform, its unattained objectives, in one word its weak aspects, that stand in the focus of discussion and criticism both in Hungarian publications and in the formation of public opinion.

The forward steps conceived of in 1966 and implemented in 1968 in practice may be summed up – without claiming completeness – in the following:

1. *A planned economy has been realized without detailed prescriptions, plan targets regarding volume and mix of goods on part of the central bodies.* Even given the decentralization of a considerable part of decisions on production and other management matters, it has served the carrying out of the objectives of central economic control with at least as good a degree of efficiency as the conventional system of “breaking down the plan targets”. István Friss, the “great old man” of the Hungarian socialist planned economy and economic policy, who occupied a leading role for more than three decades, was perfectly right when, in every work of his on the Hungarian reform, including a paper on the ten-year balance-sheet of the reform, written not long before his death [33], he considered this feature to be the *differentia specifica* of the Hungarian reform, distinguishing it from the reforms introduced in the other East-European countries. It was in Hungary alone that what had only been a theoretical assumption, a hypothesis of the furthest seeing reformer economists of the socialist countries ever since the mid-fifties, could be shown in practice. This was only possible because the political and economic leadership of the country had adopted these ideas – in contrast to the second half of the fifties – taking their realization in its own hands, coupling consistency in respect of the pivotal questions of the reform conception with an inclination for compromises and with flexible political tactics. Discarding the system of directive planning was the most important of these pivotal questions.

2. The other great achievement which has proved to be lasting: *shifting to trade in the means of production* instead of the earlier allocation of machinery and materials, etc. in physical terms, was a related problem, being a condition of carrying out the reform. Indeed, only this could provide the foundation for real enterprise autonomy – which was and has remained an important objective of reforms in other socialist countries as well. But without this condition, that is, without free and direct contractual relations between enterprises, without choice on the part of buyers and sellers, without the possibility of freely spending the money of the enterprise, the demand for enterprise autonomy, profit-mindedness and initiative cannot be more than a pious wish. In this respect the

Hungarian ideas of 1956–1957 had been inconsistent but, since the proof of practice was missing, this grave deficiency remained hidden. But one of the lessons of the time that has passed since 1968 has been that the efficiency of operation of the economy is impaired and troubles occur when — because of external pressure or because of misconceived preference for certain economic development objectives — this basic principle of the 1966 idea is violated and its scope of movement restricted.

3. *That the multi-sector nature, or pluralism, of the economy was acknowledged* and almost completely realized, in spite of the détours and retreats, was a unique feature of the 1966 reform conception and of the 1968 reform unique indeed among the socialist countries. The equal rights, justification of existence and objective necessity in socialism of state-owned, cooperative industrial and commercial enterprises, individual small ventures, independent tradesmen etc. was not only accepted in principle, but also practically asserted. In 1966 progress was made first of all, and with powerful emphasis, in respect of acknowledging the equal status of state and cooperative ownership. What is more: the 1966 reform concept did not simply give up the superiority of the state form of ownership in favour of equality, but made deliberate efforts to apply the business organization, management and enterprising forms tested in the cooperative sector of agriculture, also in enterprises in state ownership. This had been an idea of the reform activities from the very beginning and not an ulterior notion born of the (mostly later) successes of Hungarian agriculture. (Implementation in large-scale state industry is still up to the future.)

4. *The linking of external and internal markets*, the pulling down of the wall dividing domestic production and the external market, another important objective of the 1966 conception, could be carried out the least consistently because of world market events beyond our control and owing to a mistaken domestic economic policy. Nevertheless, practice after 1968 was on the way towards realizing it and much was attained in this field: the introduction first of uniform foreign exchange coefficients, then of uniform exchange rates; the creation (if in many cases only in principle) of a choice between domestic and foreign sale and purchase; granting the right of foreign trading to Hungarian producers and commercial enterprises, including cooperatives; the gradual assertion of world market prices in domestic price formation etc. All these have led — if very slowly and by far not to an satisfactory extent — to a better and growing orientation to and interest in foreign markets on the part of Hungarian producers.

Which of the deficiencies and weaknesses of the 1968 reform can be traced back already to the 1966 conception? Again without claiming to exhaust the subject, the following can be listed:

1. *Even the 1966 conception left the decisions on investment and their financing mainly in the hands of central government agencies.* It took over, essentially in unchanged form, a point of the 1956–1957 ideas about the necessary centralization of investment in a socialist economy. This was only given a theoretical basis in the early sixties by the argument of W. Brus, the Polish economist, about the two, centralized and decentralized, models of the socialist economy. [34] The writings of Brus that had become known in

Hungary in the sixties, provided the Hungarian reformers with sound theoretical ammunition in fighting anti-market theoretical dogmas and prejudices. And yet while his arguments on the advantages of a decentralized mechanism were adopted, so was his view that, although simple reproduction had to be left to enterprises, extended reproduction had to be, in this model, as well, within the scope of authority of the state. This was, e.g., expounded in detail in Hungary in early 1964, in an article by Tamás Nagy: "The law of value and the centre of prices in socialism", [35] which served in many respects as a theoretical foundation for the reform of the economic mechanism. Indeed, the 1966 "Guidelines" did not say outright that simple and extended reproduction should be separated, but this is made clear by the fact that, after having relegated individual large investment projects to the scope of governmental financing, the "Guidelines" go on to say: "The enterprises will themselves determine and finance from their own resources (depreciation, a part of their profits) their investments maintaining [the level of] production, and those involving minor expansion. But a considerable part of investments will be financed by bank credits repayable out of profits, so that the total amount of investment credits to be granted by the bank and its distribution by industries (sectors), (and partly by objectives) will be determined in rough outline by the economy-wide plan. . ." [36]. The reform thus extended the repayability of investment fund allocations but, since it entrusted related decisions on them, that is the allocation of funds, to the economy-wide plan in accordance with established practice, the "earmarking" of credits by objectives (and, not infrequently, by "addressees"), the various facilities granted "because of the national economic interest" in practice made the requirement of repayment merely formal. Under such conditions, as we know, the "investment hunger" of enterprises was not mitigated and the efficiency of fixed asset management did not differ much from the one accustomed to under the conventional directive planning. But why should it have differed? After all, the 1968 reform hardly affected the institutional system and decision making procedures of this sector.

2. The above inconsistency of the reform may perhaps be explained by the underdeveloped state of economic thinking, routine-like reasoning and lack of courage and, what is more likely, by the need for a high concentration of development resources because of the unchanged economic strategy (to be discussed below), the other specific feature of the 1966 conception however, that it *had left the established system of institutions of economic control unchanged* was obviously explained by deliberate political and tactical considerations. The success of the economic reform, the fact itself that the radical changes provided for, which were unprecedented in those times, could be implemented at all was made possible by the unity of the political and economic leadership of the country. If we consider the turbulent Hungarian history of the preceding decades and, particularly, the storms of political and ideological passion that had raged not much earlier about the reform of the economic mechanism, the coming about of such a united political will can be considered unique in itself in the context of the Eastern Europe of the sixties. The price to be paid was, of course, the reconciliation of various diverging interests and the making of compromises. No doubt, a condition of the reform was that

the changes in the rules of the game of economic life should not endanger the political stability and consolidation achieved with so much difficulty. Thus, it had to be avoided from the very outset that the economic reform should alienate, if only because they feared for their jobs, various members of the political and administrative apparatus. The feeling of personal insecurity that accompanies large-scale reorganization (of such evil memory in Hungary) had to be eliminated. Therefore, the maintenance of control agencies and their staff, adjusted to the demands of a different model of economic and social control, in the medium of an economy governed by another logic seemed to be a low price, which was worth paying for the success of the reform. One is not, of course, entitled to say with hindsight whether this was wise or not, whether the price was too high, or rather low. There is no way of checking. At any rate, as a result of the compromise an economic arrangement came about in which enterprises invested with autonomy to make market decisions and guided by the profit motive formally remained the lowest link in the chain of the state hierarchy of economic control. Evaluation of their activity, the appointment, rewarding or punishment of the management remained the business of such agencies of government which did not carry on economic activity and formally could not make economic decisions, since they did not possess the financial resources necessary for the realization of these decisions.

3. Leaving the system of economic institutions intact was the result of deliberate considerations, good or bad, but *the revision of economic policy or of economic growth strategy was not even considered when working out the reform conception*. True, a great many papers written in those times, and even the "Guidelines" of the reform pointed out that a rationally functioning economic mechanism would promote clear-sight and thus the working out of a sound economic structure and also sound economic policy decisions. In reality, however, the ruling reasoning concerning the interrelations between economic policy and the economic mechanism was the reverse. In a simplified manner it may be summed up in that the economic mechanism ought to be reformed because the realization of sound economic policy objectives had been hindered by the deficiencies of the old mechanism. It was not even discussed that, although the mechanism of directive planning indeed served quantitative growth, that is, extensive development, neglecting efficiency, that kind of development was also the aim of economic policy when, in lieu of the pre-1956 failed policy of national autarky, it made the realization of "CMEA autarky", that is, the satisfaction of the needs of the CMEA market, the strategic goal for what was termed the second wave of industrialization. The goal was not to produce high-technology commodities, subjected to ongoing technological innovation, and exposed to world market competition, but to make more items, in huge quantities, in a composition or of a construction that remained unchanged over a long time, and which satisfied none too rigorous standards. It was typical of Hungary that the higher leadership recognized the need to revise the economic mechanism before it became aware that the extensive economic development strategy led to a blind alley. More than a decade had to pass before the world economic shocks of the seventies forced the revision of the economic development strategy. And yet there were plenty of warnings even at that time. Ferenc

Jánosy wrote already in 1969 [37] that the reform ought to be extended to working out a new economic policy. Extensive, quantity minded, essentially autarkic development had to be abandoned since it ensured the continuation of backwardness. It is interesting, and at the same time characteristic of the then "mechanism-centred" approach, that even such a committed advocate of the reform as Jenő Fock, who was Prime Minister at the time, simply could not accept Jánosy's argument that the quantitative approach still prevailed in economic policy, and that it would make more sense to stress the modernization of the economy as a whole, instead of urging growth. In February 1970 Fock thought of this as almost a political condemnation of the Hungarian social system. [38]. In fact, the further forcing of extensive growth also reacted on the fate of the 1968 reform. One of the reasons for the stasis of the seventies was precisely that the huge central development programmes financed by the state budget demanded a quite different type of control than the normative regulatory system of a controlled market economy.

4. Finally, a kind of *technocratic approach* is conspicuous in the 1966 conception. The aim and consequence of shifting to a regulated market economy was making the economy more dynamic. Decentralization of economic decisions, a livelier flow of labour, greater price movements, a wider differentiation of incomes, increased autonomy of enterprises and organizations and, in principle, the appearance of market competition — to mention only a few real and possible developments — give birth to new social conflicts, create and bring to the surface various kinds of group interest. These try to assert themselves in the most diverse ways. It was indeed an explicit goal of the reform to bring hidden conflicts out into the open, so that social interests should be made evident and acceptable not the by statements issued by higher authority, but through a consensus that comes about in the collision and reconciliation of various group and individual interests. All that necessitates not only new "economic" but also expressly new social forums and institutions for the control, protection and assertion of interests. As András Hegedűs wrote in early 1965 in his "Optimization and humanization" [39], that is, still before the final formulation of the reform conception, that economic rationality (the reform of the economic mechanism) assumed a democratic transformation of social relations, and *vice versa*, that is, the development of institutions that serve for reconciliation of particular and global social interests. When the reform conception was worked out this problem remained unsolved, only certain claims, or rather wishes, were formulated. The neglect of the problem may, presumably, also be attributed to the wish to preserve political stability, to refrain deliberately from upsetting existing social institutions and relations. Since the reform conception essentially contained no ideas about the solution of the expected social tensions and troubles, when these actually emerged both the political and economic leadership and wider public opinion were caught unprepared. There being no new forums for the creation of a consensus and a reconciliation of interests, e.g. for the livening up to labour mobility, for increasing wage and income differentials, for the unfavourable turn in the position of some large enterprises, etc. (and one may add: for the exercise of stronger pressure on the part of the opponents of the reform based on

these tensions), the country's leadership could not answer except by introducing various restrictions and prohibitions, that is, by damping the impact of economic stimulants which were just about to get off the ground.

* * *

What appears here is neither economic nor political history. This is why I do not here examine the external and internal causes which, in addition to inherent deficiencies of the 1966 reform conception, contributed to the hold-ups in the course of the 1968 reform which had been contemplated to take some longer time, and even to the restriction, that is, to the reversal of the reform process – which I already touched on – or to the permanent pressure on the “brakes” built in temporarily and for tactical reasons. Nor do I discuss – since this is already the history of our own days – what pressing external necessities have restarted the interrupted process of the reform, enriching it with new elements and driving it into new directions.

When it comes to the history of economic thought it can be said that, in fact, the search for new ways never ceased in the Hungarian economic theory.

In the first two years after the start of the reform on January 1st, 1968 intensive work was carried out in order to further develop the original reform concept of 1966, filling in the gaps observed already at that time. I refer here to the demand to further improve the price and foreign exchange mechanisms, serving to bring about an organic connection between the external and internal markets, including the idea of convertibility of the forint. Even more important were perhaps suggestions aimed at creating institutional forms for the domestic flow of capital, since these proposed to revise one of the weakest point of the 1966 conception, that is the investment mechanism, in a manner which would have put investment under the control of the market. The reform of the institutional system, which was left intact, was a definite intention.

On the other hand, since the concrete programme of immediately carrying the reform further was struck from the agenda in the early seventies, a process that somewhat reminded of the mid-fifties started in Hungarian economics: charting the new reality created by the reform. The seventies led to what amounted to a renaissance of Hungarian economic descriptive sociology. These works pointed out that a new system of management had developed in Hungary with its own particular contradictions. On the basis of discussing these contradictions, they tried to formulate those directions of progress, which the 1968 reform had not yet wanted or could no longer implement – because of the changed political constellation.

The third wave of the mechanism debate rose higher and higher beginning with the late seventies – in connection with the changed foreign economic position of the country and the radical change in economic policy. The first result of this third wave was the implementation of government measures aimed at boosting small ventures in the early eighties. This did not simply mean legalization of the tacitly tolerated “second economy” and/or resolution in some way of the performance-withholding influence of the rigid work

organization and income regulation of state enterprises. Much more was involved, that is the beginning of the revision in practice of the social and economic institutional system left intact by the 1968 reform. Indeed, these initial pragmatic steps are organically built into the reform programme outlined in the Declaration of the CC of the HSWP in April, 1984 concerning the further development of the system of economic control and management. [40] The declaration outlines an action programme for many long years to come, which is open in every direction. Therefore, the third wave of the mechanism debate can hardly be said to have abated. One cannot therefore risk a forecast going into details about the final, mature forms or the date of final taking shape of the Hungarian economic mechanism.

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ВТОРАЯ ВОЛНА ДИСКУССИИ О ХОЗЯЙСТВЕННОМ МЕХАНИЗМЕ И РЕФОРМА 1968 ГОДА В ВЕНГРИИ

Л. САМУЭЛИ

Конец пятидесятых и начало шестидесятых годов характеризовались в Венгрии — как и в других социалистических странах — стремлениями к рационализации системы директивно-натурального хозяйствования путем укрупнения государственных предприятий, использования экономико-математических методов планирования, совершенствования методов ценообразования. Однако из-за целого ряда рассматриваемых в статье причин — по инициативе руководства ВСРП — начиная с 1964 года развернулись широкие работы по подготовке радикальной хозяйственной реформы, программа которой была окончательно принята в 1966 году и которая вступила в силу в 1968 году. В статье большое место занимает анализ дискуссии вокруг вопроса, следует ли идти по пути рационализации, «совершенствования» системы директивного планирования или отказаться от нее; в случае же отказа какова будет роль, соотношение плана и рынка в новом хозяйственном механизме.

Более полутора десятка лет функционирования сложившегося после реформы 1968 года хозяйственного механизма позволяют сделать вывод, что в Венгрии возник новый, третий вариант социалистического планового хозяйства, отличающийся от двух других — советского и югославского — вариантов существующих социалистических хозяйственных систем. Такой результат реформы отчасти соответствует ее первоначальным целям и принципам, отчасти явился итогом сознательных компромиссов, отступлений от принципов реформы, отчасти же — последствием непредвиденных изменений внешних и внутренних условий. Автор подытоживает как положительные стороны, достижения реформы, оправдавшиеся на практике, так и ее недостатки, причины которых коренятся уже в ее замысле 1966 года.

Положительные стороны реформы, прочно преобразовавшие систему социалистического хозяйствования в Венгрии: 1. осуществление на практике централизованного планового хозяйства без плановых объемно-ассортиментных директив центральных органов; 2. переход к оптовой торговле средствами производства от системы натурального фондирования материально-технического снабжения; 3. признание многосекторности социалистической экономики, прежде всего равноправия и разнородности государственной и кооперативной формы собственности; 4. стремление к органической связи между внешним и внутренним рынком.

Недостатки, непоследовательности, слабые стороны первоначальной концепции и сложившейся практики: 1. оставление в компетенции центральных государственных органов принятия решений и финансирования подавляющей части капитальных вложений; 2. сохранение в сущности неизменной институциональной системы народнохозяйственного управления; 3. продолжение прежней стратегии экстенсивного экономического роста; 4. технократический характер реформы, не предусмотревшей создания новых форм и методов проявления и разрешения общественных конфликтов, расширения общественной инициативы и контроля.

В центре развернувшейся с конца семидесятых годов третьей волны дискуссии стоит преодоление как раз этих недостатков пореформенного хозяйственного механизма.

RESTRICTION AND ADJUSTMENT

A. RÁBA

Since 1979–1980 restriction of aggregate demand has been the dominant feature of economic policy both in Hungary and in Western Europe. Nevertheless, the causes of the strict curbing of demand and the deriving consequences in Western Europe essentially differ from those in Hungary. The author analyzes these differences, first of all from the aspects of employment, general market equilibrium, price trends, rates of exchange, import processes and investment activity.

In Hungary, in consequence of the selective restrictive measures, the balance of trade has improved in recent years, but the imbalance between domestic purchasing power and the available commodities has become acute. The persistence of a “seller’s market” and the inconsistencies of the control system make it difficult for enterprises to combine their existing and latent resources in a rational manner.

In examining and evaluating the road followed by Hungarian planned economy since 1968, the question is often asked what the special characteristic of this road is. Perhaps it does not amount to vulgarizing if the question is answered in the following simplified manner: it is the experimenting of a socialist country to put market automatisms and enterprises’ independent decisions at the service of global social aims. For this end, such “rules of the game” are wanted which support the efficiency of planned central control and management with the sovereignty of enterprises and consumers.

This is the road the Hungarian economic control and management stepped on in 1968. Looking back now on fifteen years, the tendency of the economic reform and, what is more, the international significance of the reform have been justified by the facts of development and even more by the enlarged possibilities of development ability.

The road, however, has not been entirely smooth or free from frictions. Let us for the moment disregard economic policy, for example, to what extent the decisions that determined the rate and trends of economic growth after 1973–1974 satisfied the requirements arising from the world economic changes, and let us stick to the subject of economic mechanism. After 1973 the measures shaping the tools of Hungarian economic control and management did not follow the main tendency of the reform conception any longer, and after 1978, the restrictions applied in an emergency situation – whatever their conception – increasingly counteracted the development processes expected from

the reform, i.e. the unfolding of a flexible enterprise reaction on market changes, as well as of a technological-technical renewal.

We shall not discuss either the international causes (beyond our control) of the increasingly difficult circumstances, nor the domestic causes (under our control) of coming off the path, but shall mention a certain aspect of the consequences. We wish to point out the fact that the effectiveness of market regulation as applied in Hungary, and the "results" of economic policy restrictions, increasingly severe since 1979, are different from, more exactly, lag behind what formally similar measures achieve in market economies.

In any country, the specific features of economic policy are more or less determined and coloured by the available resources, the social system, the ruling political currents, past heritage, etc. These distinctive marks may justify reservations, if economic development and the successes or failures of economic policy are examined also against the background of international analogies. No country or group of countries can be set up as an example for any other country, for the historical precedents, potentials and given conditions of each country are different.

Therefore, what is explained here-under is not meant for comparison, but rather for a parallel description — perhaps offering lessons — concerning a few concomitants of demand restriction, relying on Western European and Hungarian experience. The connecting link is that the curbing of purchasing power has been of major importance in the economic policy of Western European countries, as well as in that of Hungary. We have not made any independent statistical investigation. Ample and diversified literature is available today on macroeconomic processes. The present paper is limited to summarizing certain phenomena in connexion with the restriction of growth.

Restriction: why, and how?

In Western Europe, the increased restriction of demand since 1980 has been called for by three, partly interrelated, factors. First, the sudden further price rise of imported oil (the second "oil price explosion"), second, inflation striking again, after being virulent and flaring up from time to time during the past fifteen years, and third, the unstable balance of international payments of most of the countries.

The sudden rise of oil price is in itself a factor which played no small role in accelerating inflation, and in deteriorating current account balances of payments. Galloping inflation is another phenomenon having its complex, "independent" reasons, though both sudden oil price rises, and the unusually steady dollar exchange rate of 1982–1983 forced prices up additionally, this latter effect exerting itself in countries outside the United States. Balances of trade and of payments have become unstable for other reasons beside the oil bill: first of all because of the so far unaccustomed rate of and speed of changes in interest, in the deviation of exchange rate, proportions and the increased role of speculative capital.

These have been the factors that prompted OECD countries to change their economic policy at the beginning of the 1980s. While rationalization of energy consumption and, in the energy sector, reduction of the share of oil and especially of imported oil to the benefit of other primary energies (such as coal and nuclear energy) have been even more enhanced, the main point of the change is that priority has been given to the policy of curbing aggregate demand. A remarkable success has been achieved in this field and thus also in fighting inflation. This was attributable mainly to monetary measures, such as credit restriction, higher interest rates, a more or less controlled increase of the quantity of money and further, to the so-called income policy which means, first of all, maintaining the level of real wages, or in certain instances lowering it, by taking advantage of large-scale unemployment and the shattered position of trade unions.

The demand of the public sector has been curbed, however, with somewhat less success. Certain items of budget expenditure have been functioning and became consolidated since the period of establishment of the welfare state (the 1950s and 1960s) as built-in stabilizers and irrevocable social achievements. It was of no less importance that the inevitable infrastructural development, the direct or indirect subsidies to state-owned and a few private enterprises, and the maintenance or perhaps increase of government administration and armaments, blocked the way to reducing expenditures. And, in a period of slack business, the missed revenue (in comparison with the planned figure) had an adverse effect on the revenue side of the budget. Thus the increasing financing needs of budget deficits (while forcing up the level of interests) gave rise to such interest burdens which themselves grew to become considerable and permanent expenditure items. It became imperative to make an attempt at cutting down all those items of budget expenditure which it seemed possible to reduce without much curtailing the ambitions of the currently ruling governments, upon judgement of the domestic political power relations and of social tolerance.

In Hungary, some of the reasons why an increased restriction of demand became necessary were different from the above-mentioned ones. Also the precedents, the timing, and the methods of the increased restriction are specific to Hungary.

The emergency that occasioned the turn in economic policy came about long before the second sudden oil price explosion, that is, quite independent of it. In 1978 the balance of trade showed an extremely large deficit in convertible currencies, accompanied by a substantial accumulation of the stock of debts. Since between 1973 and 1978 Hungary had not bought crude oil either from the Western or from the developing countries, and its exports of oil derivatives to the West had covered its modest oil imports, the first sudden rise in oil prices (1973–1974) had given no reason for the large-scale deterioration of the Hungarian balance of foreign trade and of international payments. In the first half of the period from 1973 to 1978, Hungary could buy oil from the Soviet Union still at the old, advantageous price, and in the second half of the same period still at a considerable – though gradually decreasing – discount. Primary energies excepted, the rate of the world market price increase of raw materials was not above that of

finished products — with considerable fluctuations.* Thus the deterioration of Hungary's terms of trade in convertible currencies and of its external payment positions can up to 1978 only to a small extent be attributed directly to the effect of the price explosion. It was much rather an indication of the fact that the microstructure of Hungarian production and foreign trade could not keep pace with the changing world market demands prompted also by international competition. When the absorptive capacity of foreign markets relatively narrowed down after 1973, the Hungarian production and export offer were not flexible in comparison with the continuously changing international import demand and the competitors' export activities.

Between 1973 and 1978 adjustment mechanisms and actions took effect in Western Europe as well as in many other parts of the world not only in the energy sector but in wide fields of the public and private economy, as a result of which the shock caused by the first oil price explosion as well as the deficits in balances of payments could be more or less counterbalanced by 1978. During the same period in Hungary a dual process of just an opposite direction took its course. On the one hand, an expansion of public and private consumption as well as of investment took place, on the other hand, the fast enlargement of production and domestic consumption was "extensive" in nature, that is, neglecting the cost/benefit ratio, since it took place not in the spirit of a continuation and further development of the 1968 reform, but in the direction of a recentralization, curbing enterprise independence, and suppressing initiative and risk-taking.

Parallel to this, Hungarian positions weakened in the international trade in industrial products and services, and in the international flow of production factors, partly as a consequence of sharpened competition and the lower dynamism of foreign markets. In addition, bottlenecks emerged in an increasing number within the framework of cooperation with CMEA countries. The supply of a wide range of up-to-date technologies, and the level of imports of raw materials earlier accustomed to were at risk. Also, because of the deteriorating terms of trade, and of the tensions present in the national economies of the CMEA countries, the balance of the in- and outflow of resources developed unfavourably for Hungary.**

*In Hungarian foreign trade, the prices of agricultural and food products imported from non-socialist, mainly developing, countries, and those of chemicals and machines imported from advanced countries grew faster than the price level of Hungarian export articles in the same groups of products. It is conspicuous that in that period the Hungarian export price level had hardly been rising in the most dynamical sectors of world exports: the group of machines and chemical products.

**The growth of Hungarian imports from the CMEA countries slowed down considerably after 1975 and the import items that could not be obtained on this market — and which were very much needed because of the then still lively economic growth — burdened the Western trade balance of the country. Between 1976 and 1978 the volume of Western imports was growing at a rate several times higher than CMEA imports: by approximately 12 percent on a yearly average. And, the deteriorating terms of trade with the CMEA countries compelled Hungary to boost its exports to these markets at a much higher rate than its imports from the same markets. To this is added the rising tendency of the Western import content of exports to the CMEA market. See the study [1] of András Köves and Gábor Oblath.

All these circumstances led together to the wide application of economic policy restrictions in Hungary since 1979. One tendency of the restrictions was to tax away, or "centralize" an increasing ratio of the income earned by enterprises. This had two consequences. Instead of differentiating, it rather equalized enterprise incomes, since more could be taxed away from those enterprises that had a high income and income generating ability. Further, complemented by measures raising the investment cost level of enterprises, it threw back the enterprise accumulation capacity. Another tendency of restrictions was to hold back central government investments and development projects, and to eliminate or postpone earlier envisaged ones. The third tendency of restrictions (and partly their consequence) was reduction of the real purchasing power of households*. Since the most important factor directly leading to the tightening of restrictions was the tensions presented by the balance of payments, the driving back of imports became the fourth channel of restrictions, which, as opposed to the tendency (not the real consequences) of the above-mentioned measures, did not promise to restore the balance between domestic purchasing power and the available supply but led to a subsequent worsening of the disequilibrium.

Effects of restrictions of demand

As for the effects of the severe demand restriction, marked differences show between market economies i.e. the West-European countries, and Hungary.

a) It is a well known and striking difference that in capitalist countries decreased production or a slowdown of production following restrictions immediately raises the number of the *unemployed*. The employed-unemployed ratio changes not only in certain periods and not even primarily as a function of market fluctuations i.e. the increase or decrease of aggregate demand. Economic sectors develop at an uneven rate also under "normal" conditions, with no high fluctuations on the market. For certain products and services demand grows — or even diminishes — faster, for others, more slowly. These changes are, more or less, sooner or later, followed by production; the structure of production is also changing.

The "trade structure" of labour, and its geographical structure are comparatively rigid; it is often with a delay that labour is regrouped in conformity with the changing composition of the needs of production and demand. This is to say that the regrouping of labour needs time: the worker has left the old job and not yet found a new one. Perhaps he cannot get a job for a long time, or not at all. It may happen that he is unable to learn the new trade that is in demand. This is the origin of "structural" unemployment. And at

*We shall not discuss other institutionalized restrictions hindering growth as well as the improvement of efficiency, such as the practically prohibitive taxation imposed on a wage level increment exceeding the minimum.

a time — as is the one under investigation — when aggregate demand and production drop or are stagnating, the rate of “cyclical” unemployment is rising as well.

Especially since 1980 unemployment in the OECD countries has been a severe social shock and grave problem. One component of this phenomenon is the mass failure of small private businesses and the bankruptcy of small and medium (and a few large) enterprises and institutions.

In Hungary, the structural transformation of demand and production elicits labour shortage, or leads to labour surplus at the working place affected. The sectors and enterprises increasing their production cannot easily find labour for growth, since the enterprises forced to reduce their production cannot easily — nor wish to — release labour. Thus the structural change or the need for it does not bring about “structural unemployment”. And, restriction and stagnation or reduction of production are not concomitant with “cyclical” unemployment in Hungary. Nor is bankruptcy of enterprises struggling with financial difficulties a characteristic phenomenon. This stability involves, however, social costs, most of which are not borne by the enterprises or individuals concerned: society is forced to pay them indirectly. The rigidity of the Hungarian labour economy wards off — in a short term — the risk of losing one’s job, yet in a long term it increasingly hinders adjustment of the production structure to changing demand, as well as the replacement of labour by up-to-date equipments. Such replacement is in many cases not profitable for enterprises, because wages have a disproportionately low share in costs.

b) In capitalist countries decelerating economic growth, and a periodical or permanent slackening of demand increase the selectivity of *supply*. The production and supply of goods for which there is little demand, which have grown outdated and can only be sold at a loss are reduced. As competition becomes sharper, it becomes increasingly vital for enterprises to better adjust themselves to the relatively lower demand, its composition, and the differentiated needs of potential customers and groups of customers. Thus, slackening growth and total demand do not hinder, but on the contrary, stimulate technological renewal and innovation, accelerate the replacement of the range of goods, and encourage efforts at reducing per unit costs. From the relatively smaller amount of investment more is spent on modernization and renewal, energy rationalization and saving on material consumption, and less on the establishment of new capacities.

In Hungary, a similarity to the above can only be found in the last respect: in that a relatively larger ratio of the diminishing investment volume is spent on the renewal of fixed assets than on their expansion. However, in the taxation of personal and enterprise incomes no such criterion or selection is asserted which would assure advantage and development perspectives for the most competitive producers, best adjusting themselves to demand, as against producers working at high costs, with low efficiency, and not adjusting themselves to demand. On the contrary, an intervention reflex directed at equalizing the income of enterprises working with different efficiency asserts itself. Under these circumstances the slowing down of economic growth does not necessarily — and

mainly not automatically — lead to an increased adjustment of supply and a more diversified satisfaction of demand: it does not result in an accelerated exchange in the supply of goods, nor in a faster technological development and innovation, nor in improvement of quality. Reactions in Hungary are, with a few exceptions, delayed, slow, and complicated. Under the Hungarian conditions of production, management, incentives and institutional framework, the flexibility of supply remains far below the level required in the international competition.

The causes of all this are amply discussed in the Hungarian economic literature.* At this point, we shall refer to three factors only. Hungarian enterprise managers spend a lot more energy on the acquisition or forced substitution of inputs (labour, machines, materials, parts, imports), than on sales, perception of market impulses and adjustment to them.

It is another, by now widely known fact that the judgement of the enterprise and of its managers depends much more on the fulfilment of "expectations" by superiors and on the success of bargaining with the authorities than on undertaking new and up-to-date solutions needed for the adjustment of supply, which takes longer time than the accounting period, and which is concomitant with a lot of obstacles and risks. Further: the "responsibility for supply"** based on the monopolistic situation created by the state hinders the stopping of inefficient production and the renewal of the range of goods from the outset.

If demand is restricted and economic growth stagnating (while domestic consumption is curbed), and especially if all this is done without import competition (and even more so, if it is accompanied by import restriction), supply on the domestic market will not be any better, and the sellers' superiority will persist. Therefore, the composition and marketability of the Hungarian export supply cannot improve, either. And a strong preference of export orientation weakens the system of requirements of the normative national economic management and, because of the above outlined circumstances, cannot result in an upswing of profitable exports. Moreover, this is because successful exports are dependent on the actions of several such agents, and on the joint effect of several such factors, on which the directly exporting enterprises can by no means exert any real influence.

Let us identify a few of these factors of competitiveness. Up-to-dateness and speed of transport, functioning of the telephone system and, in general, of modern communication services, the quality of public services, interestedness of enterprises working in the preceding phases of the vertical production process, and in general, of

*Of the rich literature on the subject, only two outstanding works shall be mentioned. In his book [2] János Kornai gave a comprehensive theoretical analysis of the functioning of the existing varieties of socialist economy, the causes and components of the shortage phenomena, the behaviour of enterprises, public institutions and households, and adjustment processes. László Antal analyzes in his article [3] the break in the reform process, its tensions, and the means and consequences of the "restoration" (or "rearrangement", to use his own technical term).

**For the definition of the concept of the mechanism based on "responsibility for supply" and the explanation of its functioning see Iván Schweitzer [4].

enterprises, an atmosphere of competition or the lack of it, work morale, labour discipline and the characteristic national level of productivity — all these are factors which cannot, or hardly, be influenced by the directly exporting enterprises (and in general, by enterprises). These factors place the performance of the economy and thus also its export performance within a certain range or category, in which above-the-average or even outstanding results can be achieved through additional efforts and/or luck, yet, not so frequently and not at such price upon which an improvement of the Hungarian world market positions could be based.*

c) Deceleration of economic growth, and restriction of demand in the market economies were unambiguously accompanied by a considerably reduced growth of the *price level*. In the average of the OECD countries, inflation dropped to half between 1980 and 1983. Although there are, especially in the Mediterranean region, a few countries struggling with two-digit inflation even today, in quite a few of advanced countries (United States, Japan, Great Britain, FRG, Austria, Switzerland, Holland, Belgium), the rate of inflation dropped to 3–5 percent.

Thus, while in “demand-constrained” economies the restriction of money outflow, and the curbing of purchasing power force down the price level (thereby also that of international trade), in the “resource-constrained” Hungarian economy a similar strictness does not reduce the rate of inflation in a similar manner.

The causes of this phenomenon (that is, of the fact that expected results do not materialize) are not at all mysterious. Inflation is closely related to the existence of excess demand. When central management tries to tap the purchasing power of enterprises through new or higher taxes, three processes take place. *First*, enterprises will spare no efforts—resorting to various formal and informal channels, arguments and bargaining — to replace at least some of the subsidies, incomes and means of payment taxed away, in order to finance their current activities and development projects. Thus, the intended tapping of purchasing power will only partly be successful. (Soft budget constraint.) *Second*, an absolute or relative deterioration in the financial position of enterprises — or even its anticipation on the enterprises’ part — gives impulse to overinsure themselves by procuring available materials, parts of machines and, as far as possible, imported goods. *Third*, production and development possibilities — diminishing all the same — do not prompt enterprises, as we have already mentioned, to rationalize on and perhaps rearrange the production factors,** and even less to “flee forward”: that is, to undertake. They rather prefer to take a hedgehog position, that is, they become cautious and reserved, put up defence against expected or assumed restrictions, underplan, and are determined to win for themselves a more advantageous position in the next round of bargaining.***

*See for more detail András Rába [5].

**With the prevailing system of prices, taxes, and subsidies it is not clear, whether that which is profitable or a possible solution for enterprises is also rational for the national economy.

***For a description of the seller’s and the buyer’s attitude of adjustment, or “forced adjustment” see the above-cited work by János Kornai. For the functioning of the Hungarian system of material supply and enterprise attitude in this context see János Gács [6].

The relative shortage of money could exert the expected deflationary effect only in a medium of competition and with free price formation prevailing.

It follows from the preceding that in Hungary restrictions, or their tightening, do not necessarily promote a global, and even less a structural, improvement of the demand-supply equilibrium, or a reduction of the rise in price level.

d) The particular *exchange rate policy* pursued in Hungary up to mid-1982 is also related to the above-said and, though certain changes have been made since, the whole problem has remained unsolved up to now. Since 1973 exchange rates have been made flexible in world economy. This much debated series of measures by all means increased uncertainty and risk to a large extent in international transactions, and thus also in international trade. Exporters took care not to acquire assets in weak — or, according to forecasts, weakening — currencies, while importers' interest ran to the contrary. The stability of each currency was further influenced by the differences and fluctuation in rates of interest in different countries, especially since the international flow of speculative "hot money" and the fast change of place of these capitals, not infrequently relying on rumours or expectations, have assumed large-scale dimensions.

While the movement of short-term capitals was directed by aspirations for temporary profit realization, long-term capitals sought and preferred places of investment (countries, firms) judged to be politically and economically secure, with a view to long-term returns.

All considered, since 1973 an international financial system adjusting itself with increased flexibility to the fast changes and crisis phenomena of world economy has developed, and within it, a flexibly adjusting system of exchange rates, supported also by automatisms.

Since, during the past decade, the prevailing tendency has been and remained a slower growth i.e. a comparative narrowing down of markets instead of the earlier expansion, interest has grown worldwide in increasing exports and the share in export markets, simultaneously with economizing on imports (especially on crude oil imports having grown extremely expensive). In every country, almost without exception, even in the biggest ones, and lately also in the OPEC states, the armoury of economic policy, and within it specifically of exchange rate policy, has been applied to help restore the balance of foreign trade and of international payments.

Exchange rates develop practically as a function of market relations, the changes in the dynamics and rates of prices and costs, reflecting also mutual international effects. The exchange rate policy cannot act arbitrarily without harmful consequences, it cannot break away from market realities, but it can be used to support the assertion of economic policy priorities. This does not involve a devaluation propensity in every case — however strong the interest in increasing exports. For example, Great Britain as well as the FRG (and Austria, having close economic ties with the latter) have been pursuing a policy of strong currency for a long time, because they are able to combine its advantages with other elements promoting competitiveness of their respective countries and their firms. In

any case, exchange rate policy can take measures completing, amending, and influencing the automatism of adjustment.

In Hungary, those questionable features of the functioning of the exchange rate system which are, in our opinion, justly the subject of debates, spring from two roots. First, the exchange rate level is not *developing* as a function of the real economic processes, but it is *imposed*, somewhat arbitrarily, depending on changing economic policy priorities and changeable interpretations. Second, several policy tools complementing or substituting for the exchange rate are applied: they weaken, neutralize, or distort the functioning and effect of the exchange rate.

Exchange rate policy fails particularly to fill the role expected of it in helping to restore the balance of international payments. Hungary's dependence on foreign trade and the country's export interest are not newly discovered facts. Yet in the period from early 1980 to mid-1982 (that is, at the time of accumulating Hungarian debts and in spite of the obvious signs of determination to reduce them) the forint was several times revalued against Western currencies.* Each revaluation diminished the earned, expected, or planned income of Hungarian exporters. The development of export capacities, the establishment and operation of the required home and foreign cooperations, enterprise relationships, the exploration and winning of markets and the sales activity itself are obviously the result of several years' work. That some of the export incomes, earned or expected, are unexpectedly taxed away may affect and hinder — and has obviously affected and hindered — not only the current economic activity of the enterprise, but the eventual expansion of its export activities as well.

The argument brought up in favour of overvaluing the forint has been that it prevents inflation. Such argument and such practice are reflective, however, of an economy which disposes of no other efficient means to slow down inflation, eliminate excess demand and shortage phenomena, and improve supply. Hungary has no adequate armoury with which to eliminate the domestic causes generating inflation or at least to lessen their effect. That is why the government organs responsible for preventing a rapid growth of inflation felt compelled to resort to this simple and *immediately effective* therapy: revaluation to prevent inflation from getting out of hand, and sacrificing even the viewpoints of the balance of trade.

All this is not to say, of course, that a considerable forint devaluation would in itself solve the problem. The establishment of an equilibrium rate of exchange, would not, *ceteris paribus* — under the Hungarian conditions, with the Hungarian enterprises' rather low and distorted cost and price responsiveness — necessarily lead to a sufficiently strong export incentive and an efficient import substitution. On account of the currently applied means and method of purchasing power restriction and income centralization, and because of the lack of a uniform, unambiguous and calculable financial regulation,

*Since July 1982, several devaluations have been made; however, taking into account the rate of increase of the domestic producer price level, and the two reductions of tax reimbursement, the exporters' incentive has not changed in real terms.

the role of the exchange rate loses of importance in enterprise decisions on export and import matters.* The settling of the exchange rate is only conceivable as part of a forward step to be made — and as soon as possible — regarding the entire management system.

e) How do matters stand with the relation between curbing demand and *imports*?

The slowing down, but even more the decline, of economic growth and domestic expenditure improve the balance of trade, if it leads to reduced import demand on the part of domestic users and to utilization for exports of the released capacities or of some of them. An increased volume of released capacities or commodity stocks entails an increase of exports only if this additional supply is adjusted to the geographical and commodity pattern of foreign demand and is competitive as well. If, however, the slowdown of economic growth takes place simultaneously on the main markets of a country and proves to be lasting, and further, if in the country concerned a mechanism of adjustment to changes in demand and cost proportions does not assert itself (that is, if economic policy does not prepare the country for it), restriction of the domestic purchasing power will not be concomitant with an adequate growth of exports, nor with an adequate extent and efficiency of import substitution; and even a subsequent restriction of imports may become necessary.

In market economies the relative reduction of purchasing power and the lowering of the rate of production were concomitant with a more or less proportionate reduction of imports organically incorporated into consumption and production. Besides, the ten years from 1973 to 1983 were also a period of increasingly frequent additional import restrictions in the Western countries. [8]. Proliferation of preventive measures against imports was especially conspicuous after the two sudden oil price explosions (1973–1974 and 1979–1980), when the majority of the advanced as well as of the developing countries suffered from extremely deteriorated terms of trade and the deficit of their current account balance of payments was growing. What is more, the increasingly keen competition between major exporters of sectors in a permanently threatened situation (steel manufacture, motor car industry, the textile and clothing industries, petrol chemistry, the manufacture of a few mass consumer goods, and traditionally, agriculture) also led to several *ad hoc* (tactical) or institutional (strategic), open (publicized) or (badly) concealed import restrictions. Further, as is known, the system of world economic relations is interwoven by regional and exceptional preferences and special agreements. Not mentioning the political discriminatory measures affecting Hungary, too.

Protectionism gaining ground notwithstanding, the opinion still holds according to which in the international flow of goods, services and production factors the relative flexibility and large number of possible variations and combinations still exists which the liberalization tendency of the decades following World War II had called forth.

These are the circumstances in which it has become universally typical to curb

*For the dilemmas of the exchange rate policy, see Gábor Oblath [7].

domestic purchasing power parallel to slowing down imports and, at some places even to restricting imports, periodically or permanently, generally or partially.

Such restriction in the Western countries does not call forth a shortage situation in supply, either in the households' or in the producers' consumption. There are alternative possibilities, there are several kinds of import substitution which can be resorted to and selection from which depends on profitability considerations. This is promoted by the mobility of production factors. And the exchange rate policy releases such automatisms and creates such pressure for adjustment which make households and enterprises — and to a certain extent also public institutions — interested in substituting imports to a greater extent than before.

In Hungary, the holding back of imports through some longer period leads to additional tensions hardly to be eased in the circumstances of a lasting shortage situation. The curbing of domestic purchasing power and parallel import restrictions intensify the forced substitution process, but this is not the same thing as a new combination of production factors upon profitability considerations. This has several institutional obstacles. Statistically, measured labour mobility is very high, but this stems more from the employees' efforts at changing their workplaces in masses, trying to find something better, than from the enterprises' possibilities to shape their workforce depending on demand, costs, and profitability. The inflexibility of capital regrouping and the difficulties of changing lines of production have been known for a long time. The trade relations and cooperations between domestic enterprises are inflexible and move in most part along forced paths. An adequately differentiated stimulation of performance, risk taking, and innovation hits strict limits. Therefore, the shortage situation arising from the slowing down of imports can only imperfectly be bridged over by the undertaking activity of enterprises; it much rather leads to an increasing number of bottlenecks.

An additional problem is presented in CMEA relations by the deteriorating terms of trade, necessitating to increase the volume of exports faster than those of imports. These additional exports entail additional imports accounted in convertible currencies in a period in which the total national economic production is stagnating and total imports accounted in convertible currencies are necessarily reduced.

f) The stricter "rationing" of purchasing power is asserted in a particular way in the *investment* sector. Under market conditions the trend of investment is usually determined by two main factors:

- such production capacities are established for which there is sufficient domestic and foreign demand, and the income elasticity of which is also adequate;
- investments are made into such manufacturing sectors and subsectors and activities, in which chances are good to advantageously develop cost and price proportions.

The latter is dependent on the supply with production factors, that is on their availability, possible combination and prices, as well as on the attainable level and rate of productivity.

Further, also competitors' activities and the attainable market share are taken into account.

In the last decade and, particularly, from the early 1980s investment activities grew much more sluggish in the EEC countries, than had been the trend of the preceding decades. Exceptions have been, for example, the sectors serving rationalization of energy consumption, as well as electronics, computer technology, and a few industries fulfilling orders concerned with armaments. Lasting excess supply and a fall of investments have occurred mainly in the traditional manufacturing industries (steel industry, motor car industry, the textile and clothing industries, petrol chemistry, metal mass production, and the manufacture of electrical industrial products, and of certain consumer durables). In these segments of the market capital and production capacities transferred to the developing countries have grown, and, simultaneously, firms in the developing countries (some in foreign ownership) became also competitors.

In the course of the decade in question, the "stop-go" policy elicited or intensified by the two oil price explosions led to short-term fluctuations in investments.

Primarily because of the sluggish investment activities, in the best part of the period between 1973 and 1980 capital was relatively abundant and relatively cheap, the interest level was just keeping pace with inflation, and sometimes there was even a negative real rate of interest. During this period capital owners (among them oil capital and private banks) "imprudently" granted high credits, and enterprises and states (as well as individuals) "imprudently" raised credits and accumulated debts.

Up to about 1978–1979, because of the recycling of the Arab oil capital and the lively credit granting activity of banks and international financial institutes, a liquidity crisis on an international scale could not be yet spoken of. And yet investments in the advanced Western countries fell, since the growth of aggregate demand had slowed down since 1973, the fluctuations of exchange and interest rates speeded up, largely increasing the risk of long-term investments. Moreover, some of the countries drawing high credits — mainly developing, and a few socialist countries — pursued development policies that have later turned out to be wrong. By using foreign resources they sometimes established out-of-date production capacities, turning out goods that could not be exported; they carried out extensive, often accelerated, and inefficient industrialization. And some of the foreign loans had to be spent on easing the bottlenecks — shortages of materials and food — arising from the inefficient exploitation of domestic resources.

This was the situation in which the second oil price explosion hit the world, and after which there was again a danger of inflation getting out of hand. From 1980 on, therefore, demand curbing measures increased in number. Interest rates rose to a high level, unparalleled before. Credits became comparatively scarce, among other things because with public debts rising (the arms race playing no small role in it), governments were also compelled to raise higher loans, thus presenting competition on the capital market to private enterprises in need of credit. More expensive imported oil, low raw material export prices, and shrinking markets heavily charged the balance of payments of most of the developing countries. Interruptions, lags and losses occurred in the

repayments of debts and in the settling of due interests. A large number of enterprises went bankrupt, and a lot of countries became insolvent.

Under such circumstances, the slackening of investment activities continued even more definitely in the advanced industrial countries, not least in Western Europe. Investors are compelled to increasingly adjust themselves to harder market conditions. A growing part of investments is spent on rationalization of the production process and improvement of efficiency: the ratio of renewed fixed capital is growing as against the expansion of fixed capital investment. As a continuation of the long-term trend, enterprises try to replace expensive labour through mechanization and electronization.

As a result of restrictive measures, by 1983 the rate of inflation and the nominal interest level had been successfully and quite considerably pressed down (real interest remained high) in the advanced industrial countries. Investment is still restrained, especially in Western Europe; enterprises complain and governments admit that with the prevailing high risk of investments, high capital costs, large tax burdens, uncertain domestic and foreign markets, and the confusion of international finances, enterprises do not feel enough incentive to accumulate at an adequate rate and to start investments with a slow rate of return. In this respect, the United States and Japan are in a somewhat better position; in a few Western European countries (among the big ones the FRG and the UK) signs of improvement are emerging.

In Hungary, in spite of an essential change in the world economic environment, an expansion of investment had taken place up to 1978. It became clear only then that a change must be made in investment policy. As a matter of fact, sharpening world market competition, stagnating international trade, and its transitory decline, the deteriorating terms of trade of Hungary, accumulating debts, burdensome credit terms, and the gradual assertion of the effect of the oil price explosion in CMEA trade, that is, external reasons, provided enough grounds for a revision of investment policy carried on at the earlier rate and in the earlier manner already from the mid-1980s. But this followed beginning only with 1979, that is, at the time when the above-mentioned unfavourable circumstances were cumulating. The curbing of purchasing power began and was carried on in a period when adjustment to the structural transformation of world economy and the necessary investments and rationalization required thereto were already in delay (in spite of and partly as a consequence of the investment waves of "extensive type" in the preceding period). As a result of restrictions, "investments have dropped (by 1983) by 15–20 percent in comparison with 1978". "Net accumulation amounts (in 1983) to about 13 percent of the domestic consumption of the national income, as against the rate of 25 percent accustomed to in the earlier decades." [9]

Other authors have analysed the nature and effect of the restrictive measures introduced, then amended and completed in the field of investment activity on several occasions in detail [10, 11]. Here we refer to the generally known fact that Hungarian enterprises do not react on the measures curbing their purchasing power by decreasing costs or rationally regrouping their investment actions or transforming their supply so as to better conform to market requirements, since they lack both the stimulus and the

means that would compel or enable them to do so. This situation is little changed by the fact that several enterprises that have landed in a strait are trying to find bridge-over solutions and to improve their market positions. In spite of enterprises' efforts, and government measures to curb domestic consumption and stimulate direct exports, the Hungarian share in the world market is stagnating, and even slightly diminishing.

It is not only the total volume and dynamics of investments that determine the development and up-to-dateness of supply. It is first of all the marketability of the goods produced by the new or renewed production capacities that qualify investment efficiency, with inputs also taken into account. The diminishing world market share of the Hungarian industrial products is a direct consequence of the fact that most of the development projects do not aim at, or are unable to attain, the world market standards. And the scarcity of development resources is made worse by the fact that a considerable part of resources is spent on maintaining non-profitable activities outdated as regards technology and marketability, and requiring subsidies. Such activities could be reduced and substituted by efficient (advantageous, cheap) imports.

Under the present Hungarian conditions it is hardly debatable that investment restrictions are justified. These restrictions can and could certainly ease the extremely high tension in the investment sector.

They do not change, however, the situation of enterprises, nor their approach to, and practice of, investments.* The investment hunger of enterprises hardly lessens, since the majority of their markets – first of all the domestic market – exert a drawing effect; they experience a relative shortage of production factors or of some of them (labour, up-to-date fixed assets, raw materials, intermediate products, parts, foreign exchange, cooperation and undertaking perspectives). With a view to bridging over these shortages, they are inclined to start investment actions with a view to obtain central subsidy for them. Through persistent bargaining they can usually spend more on an investment project than what has been estimated, planned, applied for, etc.

If, however, enterprises exceed in this way the centrally set investment limits, this will lead to a further cutting down of investment demands, to qualifying some as unjustified, to taxing away a part of the funds earmarked for development, and to the continuation of the downward spiral of investment. This may seriously and permanently impede technical progress and the desirable development of exports.

In Hungary, both the macro- and the micro-level allocation of development resources is based on compromises between objectives indicated in kind, that is, between various partial objectives and the groups representing the partial objectives. Allocation changes from time to time, as situations change, new objectives are found, and the power positions of those vying for resources change. The efficiency of development actions – gestation period and costs of investments, the quality, up-to-dateness and marketability

*Theoretical analysis of the concepts of "soft budget constraint", investment number, and the reproduction of investment tensions are to be found in János Kornai's previously cited work. For the interrelations among investment cycles, investment activity and economic system – in an economy with directive planning – see [12].

of the goods produced by the newly created capacities — belonging to any allocation of resources changes much more slowly.* In a contraction period, such as the present one, in which only a strictly limited amount of resources can be spent on development and current production, low efficiency and the worsening of shortage situations highlight the shortcomings of the Hungarian control and management system.

A few conclusions

Examinations have shown that the central regulation of purchasing power and, in general, of economic processes may produce widely different effects depending on a) which instruments of which direction and to what extent are applied (what the so-called policy mix is) and b) what the current situation of enterprise is.

The first group of factors: the choice of instruments to be applied has considerably grown in Hungary as a result of the economic reform, and formally it offers several fields of application similar to those offered by the armoury of market economies. Formally, because the second group of factors: the situation of enterprise sector, is entirely different. If enterprises are highly interested in as well as capable of making independent business policy and strategic decisions, and of combining the production factors upon profitability considerations, and if they are highly responsive to costs, price, as well as non-price factors, they will also be highly sensitive to changes in the central fine tuning. And, the other way round: if enterprises' interest and disposing capacity are less bound to the above-mentioned factors and if their motivation is too complicated, perhaps interwoven with non-economic factors, the instruments of economic policy able to produce the required effect in another medium cannot do so in this one. In Hungary, the measures brought in the last years, piled upon one another, hardly consistent, now restrictive, now stimulating, now changing in direction, now prohibiting — have finally weakened the assertion of central intentions.

Since the effects of the proliferating restrictions highlight the deficiencies in the ability of the Hungarian economy to function, conclusions of a general validity can be drawn.

Producers' adjustment to changes in demand and restriction of demand do not go smoothly in the market economies, either. This is manifest in the lasting standstill of economic development in many Western countries, as well as in the incessant lively debates about the economic policy to be adopted. Adjustment demands sacrifices. There are always winners and losers, absolutely or relatively, among the economic agents; enterprises and households. In contraction periods, such as the last years, the number of losers and with it the extent of the loss are usually growing. Who comes off well or badly depends not least (though by no means in every case without exception) on industrious

*Cf. with those said about the "allocative" and "creative" functions of the market in connexion with investment decisions, in the article [13] by Gábor Oblath and András Köves.

work, talent, good ideas, right moves — or their lack. Happy circumstances or official relationships may also have a role. In a ruthless competition even immoral means are not infrequently resorted to. Some of the rules of the game of capitalist society are the hotbed of distortions not in the least desirable for us.

Nevertheless, a flexible adjustment to demand, and elimination of excess demand and shortages are not the monopoly of capitalist society. Even under socialist conditions of production, the possibility must not be excluded to shape society and economy in a way which will allow of much higher performance in respect both of current and development processes, as well as of living conditions than is the case today. Means are many, variable and changeable, and the test of practice qualifies them. What counts is the results achieved in the development of the forces of production and of living standards; these are closely dependent on the mode of development and application in everyday practice of scientific achievements, up-to-date technology, and the methods of social control, that is, everything that can render production efficient and improve the way of life. This also depends on allocation and not least on the functioning of institutions.

The present paper has discussed just one aspect: whether in a period of economic slowdown and cutback a lesson can be drawn for us from the methods and effects of restrictions. One closing idea must be yet added.

On each of the three levels of economy — central government, enterprises, and households — a multitude of decisions are made daily and periodically. Decisions are made by individuals or bodies, and the tendency and content of the decisions are determined by the degree, intensity, and assertion of social control and pressure. From this point of view, there are two possible practices.

In the first case, the information necessary for making the decisions is known only to the decision-makers and their direct environment. (As a matter of course, there are strategic pieces of information which are not to be made widely known.) Those who implement the decisions and those who bear the consequences only obtain rough or formal, and often subsequent information. Their responsibility is, therefore, limited, and they do not identify themselves with the task assigned to them. The worst harm is, however, done to society: the ambition to work, initiative, and the enterprising spirit generally desired today are impaired, and production factors are left unused. Decisions made without social control — including the failure to make the necessary decisions — may prove to be wrong or at least suboptimum in a much higher proportion than decisions relying on the propelling forces of society.

In the second case, an open atmosphere prevails in public life. Politics — and within it economic policy — are influenced by events and phenomena that public opinion can follow. The actors in economic and social life — enterprises and workers — have such organs for representation of their interests which — on the grounds of the finally identical basic interests of the members of society in a socialist country — can exert pressure on government. Thus the responsibility of managers is not just a question of conscience, but they have to undertake and bear risks as well. And in enterprises, workers can exert pressure on enterprise management within a legal framework, on the basis of their

representation of interests, that is, they can have their say. In both cases, pressure serves to let the views and efforts of the various social groups having different partial interests (according to their position taken in the division of labour) openly conflict in society's interest, and to achieve that new varieties of solution, new ideas, and the possibilities for changes in personal and institutional conditions be available.

Hungary is in the relatively favourable position of having abandoned the first type of decision system and made steps toward the second. It is not only the numerous difficulties of the country, but the world economic and world political conditions as well that make it imperative to progress faster on this road.

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ОГРАНИЧЕНИЯ И ПРИСПОСОБЛЕНИЕ

А. РАБА

С 1979—80 гг. в Венгрии в экономической политике доминировало стремление к общему ограничению спроса. В тот же период политика ограничения была характерна и в Западной Европе. Но при этом, причины, которые вызвали строгое ограничение спроса, а также последствия этого в западноевропейских странах и в Венгрии были различны.

Автор анализирует эти различия, в частности в области занятости, общего народнохозяйственного равновесия, ценообразования, валютного курса, процессов импорта и инвестиционной деятельности.

В последнее время в Венгрии в результате селективных ограничительных мер улучшился внешнеторговый баланс, но обострилось неравновесие между внутренней покупательной силой и товарным фондом. Сохранение «рынка продавцов» и непоследовательность системы управления затрудняют рациональное использование предприятиями существующих и скрытых ресурсов.

Необходимо, чтобы общественно-экономические и институциональные условия быстрее приспосабливались бы к изменениям мирохозяйственных условий. Некоторые ключевые моменты этого процесса: необходимо повысить способность предприятий реагировать на изменение затрат, цен и другие рыночных условий, а также увеличить мобильность производственных факторов.

THE EXTERNAL ECONOMIC FRAMEWORK AND THE CONDITIONS OF ACCELERATING HUNGARIAN GROWTH

B. KÁDÁR

Since economic development has largely slowed down during recent years, an increasing demand has emerged in Hungarian society to accelerate economic growth. The article analyses, from the external economic aspect, how the necessary conditions may be brought about.

In the mid-1970s, a 24-year period of world economic growth came to a halt. The last decade is to be considered as the first and radical phase of adjustment to the changed conditions of a new technical and scientific industrial revolution with increasingly distinct outlines. It is not the slowdown of the growth rate that is the most characteristic feature among world economic changes. What is of a determining importance at present as well as in a medium range is that a more dynamic economic growth than that of the preceding 5 years is taking place in different structure, within different limits, and with other effect mechanisms and currents than before.*

The foreign trade performance of Hungary in an international comparison

As a consequence of the international processes emerging during the last decade, the external conditions of Hungarian economic development have grown unfavourable in a wide sphere. The more than 25 percent deterioration of Hungary's *terms of trade* between 1973 and 1983 was not only the double of the OECD average, but was the highest also in the group of CMEA countries. The sensitivity of Hungarian economy to foreign trade being extremely high by international standards, the losses suffered in the external economic sphere absorbed an extremely high ratio of the national income.

Since the servicing sector is comparatively underdeveloped in Hungary, the country takes part in the international division of labour first of all with its commodity trade. Its weight in the world trade amounted to 0.66 percent in 1938, 0.65 percent in 1955, 0.7 percent in 1970, 0.44 percent in 1980 and 0.46 percent in 1983. This slowly diminishing *weight in world trade* is, of course, not independent of changes in relative prices, and the resulting rapid advance of oil exporting countries. This is, however, only a partial expla-

*For more detail see [1, 2].

nation; because of limited statistical data it is difficult to examine the long-term development of Hungarian positions occupied in world trade in major groups of products. In the period, however, when Hungary's comedown became more definite — that is, from 1970 on — it can be quite clearly traced that between 1970 and 1980 the Hungarian share in world trade fell from 1.7 to 0.61 percent in engineering products, from 0.8 to 0.57 percent in manufactures, and from 1.1 to 0.9 in agrarian products.

The decreasing Hungarian share in world trade is not explained by a below-the-average growth of the *export volume*, that is of the export producing ability of Hungarian economy in terms of quantity. For example, between 1960 and 1980 the volume of Hungarian exports grew by more than 8 percent on a yearly average, while that of world exports by 7 percent. Therefore, the lag rather points to a slow and insufficient adjustment to world economic changes, as well as to an unfavourable price movement arising from a disadvantageous composition of supply, selection of partners, or even from a low efficiency of foreign trading activity.

The extent of deterioration in world trade positions and of resource losses because of worsening conditions and slow adjustment is conspicuous not only by international comparison, but also within the group of medium-developed or advanced countries, themselves seriously stricken by the deteriorating external conditions of growth, and struggling with structural imbalances (see *Table 1* and 2). At current prices the dynamics

Table 1
Average yearly growth rate of exports and imports (percent)

	Export		Import	
	1972-82	1977-82	1972-82	1977-82
World	16.1	10.5	16.0	10.5
Brazil	16.7	9.1	15.4	8.4
South-Korea	29.7	16.8	25.4	21.4
Singapore	25.2	20.3	23.6	21.9
Hong Kong	19.8	16.9	19.8	17.6
Israel	16.4	11.1	15.0	11.0
Tunesia	20.1	16.1	21.6	12.5
Morocco	12.4	9.6	18.7	6.2
Turkey	20.4	26.5	19.3	8.7
Yugoslavia	16.5	14.3	15.2	6.7
Ireland	17.3	12.1	16.5	12.3
Spain	18.3	14.9	16.6	12.1
Finland	16.3	11.4	15.5	12.0
Austria	15.0	9.8	14.1	6.5
Hungary	10.3	8.5	10.8	6.2

Source: UN Monthly Bulletin of Statistics, 1984/No. 3

Table 2
A few countries' share in OECD imports (percent)

	1972	1980	1983
Brazil	1.10	0.97	1.22
South-Korea	0.45	0.81	1.22
Singapore	0.22	0.51	0.57
Hong Kong	0.89	0.90	1.11
Israel	0.29	0.29	0.32
Tunesia	0.09	0.15	0.11
Morocco	0.20	0.16	0.15
Turkey	0.23	0.14	0.21
Yugoslavia	0.49	0.30	0.34
Ireland	0.55	0.57	0.62
Spain	1.05	1.10	1.16
Finland	0.81	0.77	0.71
Austria	0.98	0.94	0.94
Taiwan	0.75	1.00	1.53
Hungary	0.27	0.21	0.19

Source: OECD Statistics of Foreign Trade Series "A".

of Hungarian foreign trade was also considerably lower than that of the groups of countries investigated, or of world trade: the share of most of the countries was much higher in the imports of the advanced industrial states than that of Hungary. A valuable Hungarian achievement is only found in the radical reduction of the global foreign trade deficit, and in a definite improvement of the balance of trade settled in dollars.

The Hungarian achievements in improving the external equilibrium situation were based, however, on the *restriction* of domestic consumption and imports and were concomitant with a deceleration of economic growth in the medium run. Because of the insufficient intensity of adjustment, evolving with a delay after 1978, that is, of changing the growth path, and because of the conflicting aims of domestic stability preferences, protection of living standards, and fast adjustment, the offensive of adjustment-founding medium- and long-term growth, structural transformation, and improvement of performance were of a limited extent. The switch-over of economy and society to an export-oriented path produced modest results.

Owing to its slow adjustment ability, the Hungarian economy can exploit the upswing of world economy from 1983 to an extent below the average, while the export performance of a large number of countries in an even harder economic situation have greatly improved during the last year: even 20 to 50 percent rates of export increase are found, and, as a result of energetic economic policy therapies, complete changes in performance within a few months. As a consequence of restricting growth, and of slowness in rendering the rigid system of objectives and of control and management

somewhat more flexible, the present performance of the Hungarian economy cannot be considered as satisfactory by international comparison and confronted with requirements, even though foreign economic tensions have somewhat eased.

The requirements of accelerated growth

The socio-economic tensions and consequences of a low rate of economic growth are relatively easier to accept and bear in a period of world economic stagnation. There is substantial historical evidence that in a world of accelerated changes the economic units that will not move or react more slowly to changes than the average will gradually slide into a disadvantageous position, and will suffer the loss of markets, and deteriorating terms of trade.

In an economic environment in which the medium-term real economic growth rate of the non-socialist world amounts to about 3 percent, and the growth rate of the volume of world rate to 4–5 percent, a growth variant capable of mobilizing the growth energies of a country to reach, in the medium term, only a rate well below the average entails disadvantageous *consequences in the long run*. Namely, it cannot be left out of consideration that to make a low growth dynamics accepted through ten years will put a heavy burden on the socio-economic equilibrium and endurance, and may entail that certain social conflicts will become acute towards the end of the decade. According to the Hungarian experience, low dynamics alone does not create a more favourable environment for improving the growth *performance* of the Hungarian economy, its structural transformation and its escape from a jeopardized situation. Under these circumstances, preparation for the economic processes of the 1990s is very difficult to start. In the case of low dynamics and slowly improving performance, only a limited number of growth incentives can find their way into the country through the international division of labour, while the process of deteriorating terms of trade and of other forms of losing incomes, that is, the process of *being driven to the periphery* may become irreversible, which may then present unsurmountable obstacles to the social and economic development of the 1990s.

The losses of the last years notwithstanding, today's Hungarian society still disposes of mobilizable *growth reserves* (intellectual resources, reform of the control system, reduction of material interity, etc.), which would allow of a better growth dynamics as well as of the expansion of foreign trade. The primary condition of this is, however, to develop, in the relationship between politics and economy, a scope of movement for an economic policy apt to improve,

- from the foreign economic aspect, exploitation of the existing and potential growth incentives for participation in the international division of labour;
- from the aspect of the control system and of the system of incentives, the decision autonomy of income producers, and the appreciation of higher performance, successful enterprising and intellectual activity;

— from the aspect of resource concentration, the positions taken in the international division of labour, external economic performance, and manoeuvring ability.

Interrelations between economic cooperation with the major groups of countries and the dynamics of growth

The fact that the external and internal conditions of Hungarian economic development are simultaneously deteriorating in the eighties and that the accumulated problems urge solution, imposes certain limits on increasing the national income through stimulating the domestic market. Under the given conditions and limits the socio-economic dynamics and — indirectly — equilibrium depend on the development of foreign trade relations to a greater extent than before.

What is of decisive importance for the growth dynamics of Hungarian economy, its nature and equilibrium conditions is, on the one hand, the effect of the CMEA cooperation exerted — depending on future foreign trade price movements and financial obligations — on the volume of resources available on the domestic market, on the equilibrium conditions of Hungary's trade, accounted in dollars, and, on the other hand, on the extent to which the changed demand and supply patterns affect the sales perspectives and profitability conditions of some of the earlier important export sectors.

Regional cooperation being of an outstanding importance, acceleration of Hungary's economic growth infers intensification of regional relationships in coordination with mutual demands.

In the period from 1973 to 1983 the most dynamically growing sector of the Hungarian foreign trade relationships was that with the *developing countries*. Analyses covering the medium-range economic development of the developing countries, and the future cooperation between Hungary and these countries call attention, however, to the following:

— unlike the preceding decade, in the second half of the 1980s the economic growth rate is likely to be lower and the relative importance of the developing countries as absorptive markets will be decreasing;

— within the group of the developing countries, the biggest change has occurred in the OPEC countries, which have gained importance for Hungarian exports during the last decade. The deteriorating balance position and economic dynamics of the oil producing countries of the Middle East delimit foreign exchange earning potentials and exert an adverse effect on the external economic equilibrium conditions;

— within the group of the developing countries, economic dynamism is concentrated on the Far-Eastern countries, among them China, in which moves of the Hungarian economy are hindered by a lack of tradition as well as the distance between the geographical-economic environments.

Although equilibrium tensions of several indebted big countries are easing and the 1981–1983 stagnation has been followed by a somewhat faster growth, the conditions

and tasks of cooperation with the developing countries are more difficult than they have been during the last ten years. The shifting of the main markets, development of the foreign trade organization, an active import policy, that is, exploitation of the forms of cooperation corresponding to the potentials of the indebted countries, and a faster adjustment of structural policy may help to increase Hungary's weight – marginal today – in the foreign trade of developing countries and it is not an unfounded objective to achieve a 15–17 percent share of the developing countries in Hungarian exports. A more intensive cooperation with the developing countries may favourably influence the dynamics of Hungarian economy, its structural transformation and value-increasing processes. At the same time, however, for reasons of magnitude, it cannot bear a heavier burden in speeding up the Hungarian economic growth.

The conditions of growth, equilibriums and structure prevailing in the second half of the 1980s indicate that it is the qualitative development of economic cooperation with the OECD countries that can give the strongest impulse to growth.

The conditions of economic development in the OECD countries will be improving in the second half of the 1980s as compared with the first half. Their economic efforts have overcome the most difficult phase of the new types of shocks of the previous decade. A livelier economic growth and international division of labour offer, from the side of external markets, in principle more dynamical development opportunity to the industrial countries, participating more actively in the international division of labour. According to the most probable variant of the medium-range development of OECD countries the aggregate gross output of the group in average will be increasing by 2.5–3 percent and their imports by 4–5 percent in the second half of the 1980s. The growth rate may slow down and certain recession phenomena may emerge in 1986. At the same time, the livelier growth will not be following the path of the traditional cycle, it will not restore the environment of the third quarter of this century, and will take its course while considerable sources of tensions, uncertainties and imbalances will be preserved, and it will be accompanied by sharpening competition and accelerated structural transformation.

Under the given circumstances, no such developments are expected in the OECD countries and first of all in the West European ones which would change the earlier developed, disadvantageous situation for Hungary. A livelier growth in itself does not improve genuinely and permanently the scope of movement of Hungarian economy, it does not mitigate the pressure for adjustment intensified during the 1970s and, if the Hungarian growth conditions remain the same, it does not create better conditions for the Hungarian socio-economic development, while it does increase the internal – and to some extent also the external – pressure for a comprehensive modernization and adjustment strategy.

Development policy priorities determined from the aspect of world economy

1. The world economic challenges of the 1980s do not simply arise from the varying dynamics or rates of the growth process but from its changed driving forces, changed relations of interest in cooperations, and from the increasingly sharp competition mechanisms as well. Acceleration of socio-economic development is inconceivable without a development strategy centred on adjustment to international processes, improvement of the relative international competitiveness and performance of the country, and on a further development of the social target-system and of the control system in harmony with the latter.

If the Hungarian economy is unable to gather its forces and effectuate extensive structural modernization and improvement of economic performance in the coming years there will be a real danger of further deterioration in the terms of trade, loss of positions on the world market, slipping back into the category of the developing countries, diminishing domestic incomes, and increasing socio-economic tensions.

As for the success of adjustment in the long run, a key role is played by the development and production policies. The Hungarian economy is of a low competitiveness not only in the microsphere but also its structural disproportions have grown in the last decade. Solution of the problems of structural obsolescence must not be confined to the microsphere and the indirect control mechanisms but also necessitates an *active structural policy*.

2. The basic requirements concerning the trends of Hungarian production policy in the 1980s are indicated quite clearly by the global and specific processes and necessities outlined in the introduction. It follows that the first step in formulating a conception of production policy is identification of the basic national economic *functions*. Accordingly, the fundamental tasks of production policy are centred around the following three major tasks:

- from the aspect of growth, sovereignty and manoeuvring ability it remains a fundamental requirement to protect the external equilibrium, to prepare for the problems in equilibrium that may arise in the second half of the 1980s, and to expand at a fast rate the production capacity of internationally competitive products saleable against hard currencies.

- to improve the foreign economic manoeuvring ability, as well as the conditions of an adequate *economic security*, and of the implementation ability of the national economy and enterprise management through coordination of foreign economic and production policies;

- to improve the long-term dynamics and *income generating capacity* of the economy through value-increasing development, the exploitation of existing and potential advantages of specialization, and through restriction of the loss-making or unprofitable fields of activity.

These main movements are mutually intensifying each other in the long run, while

they may present conflicting aims in the short run, as an inheritance from the past situation (for example, the conflicting aims of improving equilibrium and income producing ability). The faster and more intensive the fulfilment of these aims, the more the frictional losses, suffered because of the conflicts, can be reduced.

Unlike the earlier sectoral approach, the production policy of *functional* approach requires mainly such effect- and coordination mechanisms, socio-economic environment, resource allocation, and diplomatic efforts that will promote implementation of the priority objectives. The secondary objectives promoting the realization of the primary objectives may also be interpreted as instruments of implementation: they do not represent in themselves a social value or a requirement, but only within the strategic system of objectives of a given development phase. These supporting objectives or instruments of implementation mostly make demands not on production policy, but on other domains of the socio-economic strategy. Without analysing them in more detail, what is important to stress in this context is the necessity of combining *production policy*, foreign trade policy, foreign policy, and *human policy* (concerned with the education and training of manpower, its psychical attitude and social utilization).

3. Of the objectives generally supporting achievement of the primary objectives of production policy the most important one is to reduce the extremely high *material and energy intensity* of Hungarian economy, surpassing the international average in view of its relative development level by 30–40 percent. The national and enterprise economic strategies preferring input minimization as against output maximization have been present in the non-socialist world for already ten years. The Hungarian rationalization efforts, started with a 5-year delay, want strengthening by all means, since reduction of the per unit raw material and energy use of the economy serves at the same time the objectives of improving equilibrium and manoeuvring ability, and of increasing incomes. As regards improvement of equilibrium, it cannot be left out of consideration that in the material- and energy-intensive field of activity, and in primary production it is the countries producing under favourable natural-geographical conditions that are gaining comparative advantages. The producing countries dispose of huge reserves, so far unexploited, in regrouping the rent from the extracting industry to the benefit of manufacturing. The international competitiveness (and profitability) of industrial activities based on a simple processing of imported raw materials has diminished all the world over.

The material- and energy-intensive activities hit limits not only in respect of improving equilibrium, but also in that of *increasing value* and improving profitability. Several of these activities are permanently loss-making or earning about a zero profit in the advanced industrial countries, with much more advantageous per unit inputs and higher sales standards than those of Hungary. Under the given conditions, the present profitability of certain primary production activities is to be considered as artificial. A domestic price higher than the import price, and poor quality can be drawbacks to the profitability and competitiveness of manufacturing sectors releasing end products in rather a wide sphere.

Finally, from the aspect of economic *manoeuvring ability abroad*, a reduction of energy- and material intensity is of key importance, since an import dependence of the present dimensions is threatening with the deterioration of the terms of trade, additional dollar burdens, compulsory exports concomitant with losses in growth, and unforeseeable economic uncertainties.

The manoeuvring ability of Hungarian economy in far-off countries, and the competitiveness of overseas exports are further constrained by considerations of transport charges in the case of material-intensive products. Therefore, with a view to realizing the production policy objectives, it is of a fundamental importance, irrespective of sectors, to reduce material and energy consumption per unit of product, to reduce at a fast rate the output of material and energy-intensive subsectors and production activities or to change their special line of production, and to give full encouragement to the recycling of wastes and to the utilization of domestic resources that can be profitably exploited. Implementation of the programmes of reducing energy and material intensity can free the Hungarian economy and production policy from inputs required to expand supply, at least in a medium run, and may release resources for structural modernization.

4. The present and foreseeable international processes necessitate that certain priorities be determined in the Hungarian *infrastructural* development:

a) In several production sectors, especially in agriculture and the food-processing industry, infrastructural development is a condition of increasing the volume of production and exports, and of improving their profitability.

b) Since economic decision processes have speeded up on an international scale, it is a basic necessity, with a view to participation in the international division of labour, to develop the telecommunication infrastructure, that is, to eliminate the serious backwardness of the Hungarian telecommunication network, to expand compensation, to carry out a large-scale electronization, to create the conditions of applying the information technologies, and to mobilize the necessary resources.

c) A country-wide expansion of storing capacities is of great importance not only for rendering smoother and accelerating export-import deliveries and production and for improving transportability and the price level, but also for reasons of economic security, since it helps in solving expensive import substitution problems if a favourable balance can be struck between the costs of storing and those of uncertain purchases.

d) From the aspect of the foreign economic performance and manoeuvring field it is important to create the logistic conditions for changing the market orientation. The shifting of world economic dynamics away from the European region, and the increasing rate of economic cooperation with overseas countries make it urgent that the long-distance manoeuvring ability of Hungarian economy be improved. The fact that Hungary is a landlocked country and that the railways, roads and telecommunication networks connecting it with the nearest seaport are underdeveloped, outdated and of insecure operation, and further, that Hungary has no bases for storage and manipulation on the seaside present a problem restricting the economic scope of movement, which presses for urgent solution.

The building up of new channels for transport is an investment into economic security, which can considerably improve the bargaining power of the country, as well as its foreign economic manoeuvring and economic functioning ability.

5. In consideration of international trends, the Hungarian production policy can be genuinely supported by technological development only if *joining the international division of labour* is considered as a strategic priority in technical policy. Through about thirty years, Hungarian technical policy aimed at establishing an autonomous development base in too wide a field, condemning the strategy of a "following" (catch-up) type. As a consequence of this policy, the "islands" of Hungarian technical progress, internationally still recognized in the first half of this century, have gradually disintegrated, the technological gap has widened in Hungary's relations with the industrial countries and, the plans and efforts of the "technical government" notwithstanding, the Hungarian technological development has assumed a "following" character. A realistic view of the Hungarian potentialities and limitations in comparison with technically more advanced countries means a deliberate undertaking of the role of cooperation and learning — already established in practice — as well as the planning and continuous improvement of its conditions. This is the strategy that may enable to establish an autonomous base and leading role in certain, narrower zones of technical progress.

Of the major centres of international technical progress, it is the achievements of the *microelectronic* revolution that is the most important to introduce for the Hungarian production policy. The way leading to it is, however, not the establishment of an import-substituting production basis. Because of the time lag between international development and the reaction in Hungary, domestic development are, on the one hand, expensive, and on the other, they are carried out with such delay that by then the final product is available on the world market in ample quantity and at low price. The speed constraint, and the labour capacity call for an import-oriented technological development policy and specialization in software. The spreading of the microelectronic "culture" requires first of all large imports of materials, parts, components, sub-assemblies and finished products, and the Hungarian value added ought to be concentrated on assembly, installation, and software-processes. Similar principles are recommended in computerization and office machine techniques.

As for the present and future production and supply structure of Hungarian economy, it is especially the spreading of *biotechnologies* that presents new conditions and demands. The biotechnological industries develop a large number of new products (they will already be launched on the market by the end of the decade), which will bring changes first of all in the development of animal breeding, food processing and pharmaceutical industries. The relatively smaller extent of Hungary's lag in this field, and more advantageous growth effects from the foreign trade aspect (higher ratio of home-based inputs, the direct effect exerted on the development of export-driving sectors) make it desirable that the resources necessary for the development of biological researches and industries be created, the results and technologies of the internationally leading researches be acquired, and the operating conditions be improved.

6. That the general objectives and ordering principles of production policy are of a primary importance does not imply, however, that the so-called *sector-specific* or activity-specific approaches can be spared. The international production policy practice, the sector-specific regulation of an increasingly wide sphere, sector-specific market and market organization structures, oligopolistic or monopolistic situations, the increasingly marked differences emerging in the dynamics of development, in price and profitability trends and sales conditions of the various sectors and subsectors, the accelerated cycles of structural changes and the limited possibilities of obtaining information about them render it inevitable — even in an environment of market economy — to elaborate the sector-specific aspects of production policy and the building out of the related mechanisms.

It has been found so far that the central management organs of economy are in a more favourable position — even under market-economy conditions — in acquiring and evaluating information on world-wide phenomena, some of them of power policy motivation, and in warding off foreign market effects also interwoven by such motivations, than small and medium-size enterprises functioning within a national economic or a subregional framework. Depending on changes in comparative advantages and foreign trade, technological and structural trends, the sector-specific aspects of production policy are centred, beyond the customary functions of infrastructural development and supply security, on stimulating the progressive and foreign exchange earning sectors, and on the suppression of the lagging sectors, as well as on the related reallocation of resources.

Of the sector-specific dimensions of Hungarian production policy, the following deserve special attention in the second half of the 1980s:

a) The quantitative development of *agriculture* in the present supply structure, and the maintenance of its foreign exchange earning role are not well grounded. In the case of cereals and animal products representing large quantities, economic policy priorities should be centred, instead of output maximization, on input minimization, cost reduction, development of the productive and commercial infrastructure, and on increasing the ratio of domestic inputs. It has, however, to be taken into consideration that development dynamics will be shifting towards the value-increasing type of developments in agriculture, too, first of all in exports to the non-rouble markets. The international income differentiation growing again in the 1980s, the increasingly international character of eating habits and the shift of demand by groups in the high income brackets towards the special products of other countries all call for a quality-oriented, diversified development of a value-increasing type, based on Hungary's comparative advantages provided by its natural geographical conditions.

b) Development policy *preferences*, that is, faster rates of development are required by the industrial subsectors which may exploit actual or potential comparative advantages or at least suffer no comparative disadvantages on account of a higher ratio, a favourable cost structure or quality of the domestic inputs (natural geographical conditions, qualification of labour and in respect of production traditions, market relations,

international growth and economic policy environment. Certain quality products of agriculture, the food-processing industry, precision engineering, telecommunication techniques and the pharmaceutical industry belong to this group. What is important to achieve is a concentration of research and development resources, making available the financial resources wanted for investments of a fast rate of return, establishment of organizational forms allowing of independent decision and flexibility, and liberalization of foreign economic relations as far as possible (the export-orientated activity of these sectors is highly sensitive to the quality of basic materials, semi-finished products and equipments, as well as to import restriction).

c) Cut-back programmes can be decided – beside clearly showing world economic pressures – on the basis of a more detailed elaboration of so far immature plans concerned with domestic impacts. Also the requirements of socio-economic stability are in harmony with an “orderly retreat” and regrouping of resources. The costs of regrouping are to be financed first of all from the resources released by the reduction of various kinds of subsidies. Of the subsectors, it is ferrous metallurgy, the heavy chemicals, the textile and shoe industries, and to a smaller extent the vehicle-building industry that are urgently to be streamlined.

Reduction does not amount to wiping out entire industries or industrial subsectors, it is only meant to stop subsidizing the largely unprofitable or loss-making activities in the above-listed sectors with unfavourable world market perspectives. In subsectors the world market position of which is fluctuating or hard to assess centrally (for example, the ready-made clothes industry) it is especially important that the fields of activities to be developed and those to be reduced should be separated from each other within the enterprises or factories. Quite a number of international examples show that in the course of carrying out sectoral streamlining programmes, for example in the shrinking light industrial production, technological modernization also supported by central preferences, extension training, market research, industrial design, etc. have led to the establishment of strengthening of new and export-oriented units. At the same time, solution of the sector-specific problems necessitates more than ever intensification and improvement of the efficiency of cooperation between production policy and the spheres of foreign policy and economic diplomacy.

Foreign trade policy conditions

Hungary's foreign trade achievements by all means reflect an – as yet insufficient – adjustment to world economic changes. To make this adjustment more successful it is important that the foreign trade sphere should help the macro- and microspheres in a fast adjustment to the international demands and conditions, in accordance with its basic function as an early warning system, through fast information, situation reports, elaboration of conceptions and formation of the public opinion. The fulfilment of this task does not much depend on the quantity of available resources.

As for the *further development* of foreign trade management, the following important tasks can be outlined:

1. Strengthening the value- and *income producing* capacity of the foreign trade sphere, partly by developing its own financial resources, and partly by laying down a system of legal and economic regulations, necessary for a larger scope of decision and management, for the possibilities of commercial capital to invest and regroup resources between sectors and enterprises, and for the conclusion of special transactions.

2. It is a fundamental economic interest and requirement of foreign trade to encourage foreign policy and financial policy efforts, as well as those directed at laying down a system of regulation of mixed enterprises, which all aim at warding off the development obstacles of international *inter-enterprise relations*, at developing a better atmosphere of cooperation between enterprises, and at drawing in foreign equity (working) capital.

Beside further development of Hungarian cooperation with foreign capital, and especially if there is no such development, it is of a decisive importance to establish Hungarian economic organizations on foreign markets. It is a general international experience of the "outsider" industrial exporting countries joining into the international division of labour with a historic delay that *production bases* established on the most important foreign buyers' markets play a key role in boosting industrial exports, improving its profitability (cutting out the commission agency, acquiring the trade commission), in providing after-sale services (particularly in the field of engineering), in mediating the needs of buyer's market regarding quality, technical standards and terms of delivery to the Hungarian producing parent companies, as well as in avoiding to a certain extent the protectionist measures of certain states.

3. Of the aspects of cooperation with the OECD countries elaboration of an active and *efficient tariff policy* is of an outstanding importance. Following an export-oriented growth path, the tariff system must not be a means of centralizing the social net income (which is the task of fiscal policy), nor should it be used to satisfy equilibrium requirements (which is to be done by an active exchange rate policy). Its functions cover practically the bridging over of problems rooted in the relative difference between the internal and external production cost systems, and the strengthening of manoeuvring ability in international trade policy. A proper "brushing up" of the Hungarian economic policy armoury is an essential precondition of improving the general functioning ability of Hungarian economy, of the trade policy cooperation with the OECD countries, and of warding off possible retorsions.

4. In view of speeding up economic growth and intensifying foreign economic relations it is indispensable to improve the work concerned with shaping the *international conditions* of Hungarian foreign trade. As for the different markets, it is first of all with countries of the Far East, Latin America and of the Arab Peninsula that the trade policy activity engaged in intensifying cooperation with these countries and in improving its conditions needs intensification without delay. In consideration of the Hungarian problem of the 1980s, it is inevitable to settle the relationship with the EEC. To establish

contractual relationships between Hungary and the Common Market is highly important from the aspect of future Hungarian exports of agriculture, light industry, metallurgy and heavy chemical industry, as well as for obtaining additional financial resources, for being able to join into some West European industrial, or research and development programmes, for the general development of competitiveness and modernization, and also for the international image of the country.

5. Another new domain of furthering international connexions is cooperation with the gigantic international enterprises. In most national states, as a consequence of harder budget constraints and a narrower domestic economic scope of government policy, the government efforts aimed at improving foreign economic positions are bound to rely increasingly on cooperation with transnational *giant companies*. Foreign trade diplomacy is to integrate, beside international regional and government-level cooperation, also the components of cooperation with the large international enterprises to an increasing extent.

In the case of small countries, — due to assymetries in bargaining power — cooperation with the international companies cannot be merely a task of enterprise management: the international strategies and attitudes of the transnational companies are widely varying and quite frequently differ from official lines of their governments.

The establishment and maintenance of connexions with companies of transnational economic dimensions, and exploitation of their organizational-conceptual characteristics represent a policy-scope-enlarging, and manoeuvring-ability-improving factor, which it is expedient to integrate into the foreign policy and foreign economic strategy. It is desirable to establish, as soon as possible, an organization apt to develop and manage relationships with the international companies.

The intensification of international economic cooperation raises the necessity to reformulate economic diplomacy tasks, and to enrich the concepts of foreign policy as well as to improve its efficiency. As for the *control system* it is to be noted that the marking out, coordination and fulfilment of tasks concerned with securing the foreign policy and economic diplomacy scope of Hungarian development strategy are not satisfactorily settled in the Hungarian institutional system of government. As for the further development of the institutional system, the question is to be decided where the unavoidable tasks can be best attended to: in a more foreign-trade-oriented ministry of foreign affairs, in a ministry of foreign trade freed from enterprise management activities, or in a new economic ministry in charge of several sectors.

In the foreign trade *organization* the necessary "putting of activity profiles in order" implies mainly the separation of activities of foreign trade control, commercial diplomacy, and the operative market activities. An efficient control is conceivable only if it can concentrate on the tasks of strategic importance, which again presses for enlargement of the enterprises' scope of activity, that is, for the development of enterprises functioning practically on the basis of a system of commission agency into multifunctional enterprises (own-account commercial, storing, further processing, etc.).

Diversified activities as well as large distance manoeuvring recommend the establishment of trading houses facilitating the combination of export-import interests.

Final conclusion

From the social, domestic, foreign and economic policy aspects it is of key importance to accelerate the Hungarian economic growth. Of the external conditions of accelerating growth favourable factors are the improving world economic situation, and the international image of Hungary which is, at present, and probably still in a medium range, more favourable than that of other medium-developed countries. Unfavourable factors are, however, the worsening terms in certain spheres of foreign cooperation, the related outflow of resources and the large-scale exhaustion of the growth reserves (material and foreign exchange reserves, croplands, infrastructure, machine park, social tolerance).

Under the given conditions the growth process can be accelerated to the extent that

- the worsening of the terms of foreign economic cooperation can be minimized or neutralized,
- the still available growth energies of the country can be mobilized more intensively, faster and more usefully, and its growth performance improved,
- the conditions of an export-oriented path of economic development, and of a more efficient and more dynamic joining into the international division of labour can be created.

Deteriorating conditions notwithstanding, the acceleration of growth is still a realistic and feasible objective. The present speed and performance of decision-making and implementation, however, do not provide for a basis of expectations about the necessary external and internal conditions required by an accelerated growth. If the present constraints on adjustment to external changes remain, accelerated growth cannot be considered as a realistic aim; or, if it is set up as one and then its unattainability or its fast exhaustion become obvious, it may cause extremely high tensions. Short of extensive and complex qualitative changes, it is a less risky alternative on medium-term to prepare politically, economically as well as socio-psychically for further shocks, to develop a strategy of "orderly retreat" or of survival, and to develop the path of a slow and selective growth in harmony with the former.

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ВНЕШНЕЭКОНОМИЧЕСКИЕ РАМКИ И УСЛОВИЯ ДИНАМИЗАЦИИ ПРОЦЕССА ЭКОНОМИЧЕСКОГО РОСТА В ВЕНГРИИ

Б. КАДАР

Меры экономической политики, направленные на борьбу с общим ухудшением внешних условий экономического роста венгерской экономики, до сих пор дали определенные результаты в восстановлении внешнеэкономического равновесия. Улучшение внешнеэкономического баланса было достигнуто в первую очередь за счет ограничения внутреннего потребления и импорта, в то время как в области роста производительности, преобразование народнохозяйственной структуры, призванных обосновать перспективный рост, результаты были весьма скромными, продолжалось ухудшение условий торговли и ослабление позиций на внешних рынках. С ускорением экономического роста во второй половине 80-х годов связаны существенные общественные, политические и внешнеэкономические интересы. На основе оценки изменившихся условий сотрудничества с главными группами стран автор высказывает мнение, что динамизация общественно-экономического развития не возможна без такой стратегии развития, в центре которой стоит приспособление к международным процессам, повышение международной конкурентоспособности и соответствующее этому дальнейшее развитие системы общественных целей и системы управления.

Главные задачи венгерской экономической политики автор видит в дальнейших мерах по улучшению внешней сбалансированности экономики, укреплению экономической безопасности и повышению эффективности экономики. Он указывает на связь экономического роста со снижением материалоемкости, развитием инфраструктуры, техническим развитием, изменением межотраслевых пропорций и свертыванием производства, а также задачи по совершенствованию внешнеэкономической деятельностью управления. В качестве заключительного вывода он констатирует, что несмотря на многообразие причин и требований, если сохранится нынешняя низкая результативность и преграды в приспособлении к внешним изменениям, то ускорение экономического роста явится нереальной целью; если же такая цель будет поставлена, то — из-за невозможности ее достижения или быстрого и очевидного провала — это может вызвать резкое усиление общественно-экономического напряжения. При отсутствии крупных, комплексных изменений более целесообразной альтернативой на средний срок представляется политико-экономическая подготовка психологии общества к дальнейшим потрясениям и переход к траектории более медленного, но селективного развития.

THE DEVELOPMENT OF INVESTMENT PURCHASING POWER: THEORETICAL QUESTIONS

T. ERDŐS

The author examines the factors determining the investment purchasing power of enterprises by setting out from the macroeconomic interrelations. First he proves that, apart from the balances of the budget and foreign trade as well as the savings of the population, it is always the profit of enterprises in the preceding year that serves as a starting point for the investment purchasing power of enterprises, though the purchasing power of the given year also depends on the credit opportunities of the firms. But the size of profit depends on the actual accumulation of the enterprises. From this the surprising paradox follows that the more efficient the economic activity of enterprises, the smaller the investment purchasing power of enterprises relative to the national income with a given rate of growth. Thus, a large investment purchasing power on macrolevel does not always reflect efficient enterprise work. Further determinative factors of investment purchasing power are the balances of the budget and of foreign trade as well as the saving of the population. Usually, the actual enterprise investment purchasing power has exceeded the planned one in Hungary because the deficit of the budget was considerable. Recently, it is the surplus of the balance of trade that has a similar effect. The author proves that the formation of an exaggerated investment purchasing power of enterprises can only be prevented in the next years if the normal revenues and expenditures of the state budget result in considerable surplus every year, it is not sufficient to abolish the various budgetary supports paid to enterprises.

The development and central regulation of investment purchasing power have long been presenting a difficulty in Hungary. This difficulty is especially serious in these days, when investment must be held back. To regulate investment purchasing power will not be an easy task in the coming years, either, even though it may grow in volume and proportion in the course of the 7th five-year plan (1985–1990), yet not without limits. In this article I shall discuss some of the theoretical aspects of the macrolevel development and regulation of investment purchasing power, which are important to know as regards both our present and future and which, as far as I can see, are surrounded by rather much vagueness in theory as well as in practice.

By way of introduction, I observe the following:

a) The object of my examination is the development of the *enterprise* purchasing power (spending capacity). Therefore, I leave out of consideration the fact that the level and development of the *total* investment purchasing power also depends on the investment expenditure financed from the budget. My attention is centered on the factors determining the size of and changes in investment spending capacity *in the enterprise sphere as a whole*.

b) The object of my analysis is not the development of the gross but that of the net investment purchasing power *exceeding the value of depreciation*. I start from the assumption that the depreciation rates are correct and that enterprises dispose of the full amount /of depreciation allowance, without the budget taking away anything of it. In further improving the reform in Hungary, it has in fact been suggested that the full amount of depreciation allowance should be left with the enterprises. Thus the total enterprise investment purchasing power exceeds the net one by the amount of depreciation. In the case of given depreciation rates, however, the depreciation allowance does not change unexpectedly or widely differing from what is usual. What is in fact difficult to control with its incalculable changes is the net investment spending capacity exceeding depreciation.

c) The size and development of investment purchasing power on the national economic level is not understandable without the *macro-level theory of profit*. And yet, nearly all economists — those examining theoretical problems as well as those engaged in economic management — rely on the regularities of changes in *enterprise profit* in trying to understand the changes taking place in spending capacity.* In my view, this is one of the reasons — perhaps the determinant one — for the confusion about the development and influencing of investment purchasing power.

We must approach solution in several steps. First we shall take for basis a model which disregards the existence of external economic relations, such as foreign trade, international capital flows, and international income transfers. Let us now deal with a perfectly isolated economy. In it we shall distinguish three sectors: enterprises, households and the state. We shall register in the enterprise sector the net income and investment expenditure of state-owned enterprises and of cooperatives (for simplicity's sake, enterprises in private ownership, household farming, etc. are disregarded). In the household sector the income and purchases (consumption) of the population are considered. And in the state-owned sector budget activities — revenues and expenditure — are examined. Inclusion of the state-owned (budget) sector makes it somewhat difficult to understand interrelations: a) Net incomes — after taxes — have to be examined both in the state-owned and in the household sector. b) In the state-owned sector total revenue and total expenditure are recorded. The latter also contains wages and wage-like expenditures, which are, in fact, used for purchases in the household sector. (For example, wages of government officials, pensions, etc.) Therefore, it has to be noted that the income and purchases of households are not solely dependent on the wages paid out by enterprises, but on payments by the budget, too. The budgetary effect is felt in the changes in earnings and expenses of the household sector. This, however, will not be specifically demonstrated, since it does not affect basic conclusions.

*Henceforth the terms "investment (accumulation) spending capacity" and "investment purchasing power" will be used as synonyms. (Ed. note.)

Accumulation of the enterprise sector and its investment purchasing power

The initial model exhibits the accumulation expenditure of enterprises (denoted by I), the consumption expenditure of households (denoted by C) and the expenditure (purchase) of the government sector (denoted by G). Against the expenditures, there are the incomes of each sector. Let the net income of the enterprise sector be P , that of the household sector W , and that of the government sector T . The sum ($W + P + T$) is equal to national income denoted by Y . For simplicity's sake, it is assumed that the exchange value of money is stable, the price level is not rising. The household and the government sectors are considered as balanced, i.e. there are no savings or overspending either in the households, or in the budget. It is with such assumptions that the question is first put, on what the size of the enterprise investment (accumulation) spending capacity depends.

In a given year t the accumulation expenditure of enterprises was, say, of an amount I . Why it was exactly of size I is not important for the time being: we just note its given level. As was the size of I , the same had to be — with the given assumptions — also the sum of P . Within the value of national income, namely, W represents production costs for the enterprises, which is reimbursed in that the household sector spends it on purchases, the amount of which is C . (There are no savings from wages.) The part of national income corresponding to W goes into the possession of the members of households. T , i.e. the tax revenue of the budget also represents “costs” — directly or indirectly — for the enterprises, and it flows back to the enterprise sector through the expenditure of the budget, either so that the budget purchases from enterprises, or that it pays wages, pensions, etc., which the members of households will spend on purchases. (This latter transfer will not be separately examined in the following.) As opposed to this, the expenditure on accumulation does not represent costs for the enterprise in the given year t — it will do so only *later*, as a consequence of the depreciation of fixed assets —, but it constitutes *receipts* of the enterprise sphere. That is to say, the total receipts of the enterprise sector exceed the total costs by the sum of I . But the difference between receipts and costs is nothing else but the profit of the enterprise sphere. Accordingly, with the given initial assumptions the profit of the enterprise sphere is determined on macroeconomic level by the accumulation of the enterprise sphere as a whole, i.e. P is determined by I .*

*In order to avoid misunderstandings, a few remarks must be added to this statement.

— We arrive at the same result if the problem is not scrutinized from the viewpoint of national income, but from that of the gross social output. Namely, the material and energy consumption of the replacement fund C of the gross output simultaneously represents, on *macrolevel*, expenditure and income for the *whole* of the enterprise sector, and depreciation can exactly be balanced by expenditure on replacement, which represents receipts for the enterprise sector as a whole. If replacement is higher than depreciation, the additional replacement is registered as net investment (this is automatically taken into account in registering accumulation), and if replacement is lower than depreciation, then it is exactly by the amount of this difference that the volume of accumulation will be smaller, for accumulation = gross investment — depreciation. (At least this is how the volume of

I equalling P is embodied in means of production, i.e. *accumulation (investment) goods*. That is to say, in the year t P materializes in as much of investment goods the price of which amounts to P . It is easy to see that in the year t_2 this P cannot be spent on accumulation, since the P of the year t_1 is, on macrolevel, nothing else but *accumulated* means of production. Nevertheless, an investment (accumulation) spending capacity does exist. It has to be remembered that the flow of commodities is always accompanied by a flow of money. Among other things, also accumulation expenses are mediated by a money flow: enterprises buy and sell investment goods among themselves through the mediation of money, whereby money flows from one enterprise to another. Thus money does not disappear from trade with the buying and selling of goods, its amount is *left, unchanged* on macrolevel by the accumulation expenditure, as any other expenditure on purchase. Therefore, if accumulation was of an amount I in the year t_1 , there exists such investment (accumulation) spending capacity in money which, with a given velocity of circulation and given money sparing operations, *enables investment (accumulation) of exactly the amount I in the next year t_2* . That is to say, the investment spending capacity is determined, in the first approximation, by the investment (accumulation) expenditure of the preceding year.* Nevertheless, the following has to be observed.

accumulation is shown in statistics.) Either way, the result is this: the size of P depends on the value of I .

— With a mind accustomed to the microeconomic world, it is rather hard to understand that P depends on I and not the other way round. The macrolevel equality of the two amounts is recognized by relatively many and relatively easily. A frequently raised objection is, however, the following: P and I are equal, because it is profit that is spent on accumulation, i.e. I depends on P . In this context, however, it has to be remembered that each enterprise spends a different amount on accumulation than was the profit it earned in the preceding period, and the accumulation of each enterprise differs in each given period from its profit earned in that given period. (It is credits that allow this.) The *ex post* equality of P and I is perfectly understandable if the macrolevel enterprise profit depends on I . The equality of P and I would be, however, perfectly inconceivable, had I to adjust to a given level of P .

— In the socialist economy P is equal to I *ex post*, since there is no individual consumption by capitalists in it. As a matter of fact, we disregard the not too considerable enterprise profit sharing fund which formally stems from the profit in the accounting of enterprises. The profit sharing fund has also to be disregarded since it is in fact a kind of wage, not profit.

— Profit is net profit after taxes, which equals *ex post* the accumulation by enterprises. It may, of course, happen that the profit equalling this accumulation, or a part of it is taxed away by the budget. This means, of course, that enterprises can carry out accumulation only by relying on allotments from the budget. Such was in fact the model that had prevailed in the “hey-day” of socialism. This case is disregarded, and such conditions assumed, under which enterprise accumulation takes place without allotments from the budget.

On the factors determining the size of the macrolevel profit detailed analyses are to be found in the works [3], [5], [6], [7].

*This means that “in first approximation” investment spending capacity is of the same size as the profit of the preceding period. And yet it would not be correct to identify the investment spending capacity with the profit itself, since, as we have seen, on macrolevel it is not from the profit of the preceding period that the investment goods of the ensuing period are bought. (This is so because

What is involved here can only be the *first approximation* of the investment (accumulation) spending capacity. Namely, this capacity can be *bigger* than the profit earned previously. Credit operations must be taken into account. It may happen that the accumulation aspiration of enterprises materializes in larger sums than the profits of the preceding year. If the capital/output ratio is unchanged while production is increasing, the intended accumulation will usually be larger than the profit of the preceding year. By raising credits, enterprises obtain additional financial means, which increase their spending ability on accumulation. Thus the accumulation spending capacity is adjusted in the following to their investment activity. Of course, it is not sure that enterprises can easily get the credits. The bank may restrict credit granting, or may demand a very high rate of interest. Limited credit granting constrains the growth of the investment spending capacity from the outset and, if enterprises are responsive to costs, the high interest rate may set a limit to demand for credit and may even make enterprises reduce their banking debts. A certain amount of accumulation always materializes, equal each year — *ex post* — to enterprise profit on the national economic level. This will be the basis of the investment spending capacity of each ensuing year (period).*

The former statement is of decisive significance. What is involved is no less than that, with the given assumptions, the central influencing and keeping between suitable limits of enterprise investment activities depend largely on how much the economic control organs *prompt* enterprises — by shaping the economic environment and bringing the economic mechanism up-to-date — to economize on capital and investment goods. The development of an enterprise initiative reasonably taking risks, and elimination of wasting investments are both necessary. In this case a faster development may be achieved, while engaging relatively less capital and spending less on accumulation. It is, of course, by all means necessary to influence the accumulation spending capacity itself, for example, through taxation, credit, or interest policy. In any case, however, *the limits* between which the enterprise accumulation activities are pursued, their *general* capital and accumulation (investment) efficiency, the trends of the latter, and, finally, *the level*

the profit of the year t_1 is embodied in investment goods and not in money. Therefore, it cannot be used for purchase.) On the other side, it may be said that the accumulation (investment) purchasing power depends on the profit of the preceding period (year).

*This problem could yet be examined from several other aspects. Enterprises may dispose of spare money, which they spend on purchasing (investment goods) the next year. This is to say that the velocity of circulation of money grows. At such times enterprises are not in need of credits to increase their accumulation, therefore, the interest rate policy has less influence on the size of the investment purchasing power. It may even be that the accumulation aspiration of enterprises is less than the investment spending capacity corresponding to the profit of the previous year. That is, the accumulation of the next year may drop back again, accompanied by a slowing down of the velocity of circulation of money, increasing money saving of enterprises, or a reduction of banking debts. As accumulation is decreasing, so is profit on the macrolevel and, accordingly, the accumulation spending capacity is reduced *for the next period*. What we see is always this: investment purchasing power may decrease or increase, the change always starts from the profit of the preceding year and behind the profit there is the investment (accumulation) activity of the preceding year.

and trends of the accumulation spending capacity basically depend on the general system of conditions of the economy.

As a matter of course, it never causes apprehension if the impact of the economic environment on enterprise investment activity is underlined. The following paradoxical statement is, however, all the more embarrassing. An efficient, flexible and successful enterprise management entails on macroeconomic level, *with a given growth rate*, not a high, but rather a *low* investment (accumulation) spending capacity. On the national economic level an investment spending capacity which is large in comparison with the national income reflects (with a given growth rate) poor work on the part of enterprises. A relatively large investment spending capacity is only compatible with good enterprise work – again on the national economic level – *if growth is dynamic*. However, with a fast growth rate, and yet efficient enterprise activity the rate of investment spending capacity may still be lower than with a slow growth and enterprises badly managing capital and investment. The confusion arises from the fact that it is not clear for the mind accustomed to analysing microeconomic events that *on the national economic level the profit margin is determined by the rate of accumulation*. If, on the national economic level, enterprise activity is inefficient, a given growth rate can only be achieved through larger accumulation, and thus also the profit margin will be higher. Almost everybody thinks that, under competitive conditions on the market, the more efficiently working enterprise earns a higher profit, and thus the more efficient enterprise disposes of a higher investment spending capacity. But they do not reflect that, if *each* enterprise worked equally well, the same growth could be achieved through less accumulation, and thus the share of profit would be lower within the national income. Further, it is not a generally known interrelation, either, that if efficiency increased in each enterprise, the share of profit and thus also of the investment purchasing power in the national income would not be growing but, paradoxically, *decreasing*. The error lies, in fact, in the approach: for many it is not clear that by simply adding up individual facts, it is not sure that we arrive at understanding what is *general*. It is in this context that the Western economic literature speaks of the logical error of “fallacy of composition”. It is this error one meets with when reading in Hungary about the development of the investment spending capacity. The authors of official studies and proposals submitted to the economic control organs also commit this error frequently. Such and similar statements are found there: “In respect of macroeconomic development and equilibrium, the fact must by all means be considered as a deficiency of income regulation that the incomes of the enterprise sphere are increasing much faster than those of the national economy, in spite of the fact that the efficiency of enterprise production is not improving.” “The producer enterprises earned higher profit than what would have been justified by their actual performance.” “Our international competitiveness is not satisfactory. Notwithstanding, a disproportionately high rate of the national income is embodied in enterprise profit.”* These

*The statements in quotation marks are not exact quotations, but only concise formulations of ideas to be found in studies drawn up for official use.

statements reflect a lack of understanding of the fact that the higher profit of the whole enterprise sphere and the resulting comparatively high investment spending capacity are necessary consequences exactly of the *low efficiency*. We can also say: poor enterprise economy in itself *does not constrain* the investment spending capacity of the enterprise sphere *as a whole*. The "result" is rather that the large-scale enterprise accumulation drives the purchasing power of the household sector — and perhaps also that of the budget — back to a lower level.

Accumulation (investment) spending capacity and the savings of the budget and households

We shall now set aside the proposition that the receipts and expenditures of the budget and of the household sector are always balanced. In fact, the household sector as well as the budget either have surplus receipts (they save), or spend in excess of their receipts each year. That is, W is never equal to C , and T always differs from G . The assumption is maintained that the exchange value of money is stable, i.e. that the price level is unchanged.

Let now the spending of labourers and of the clerical staff increase in a way that they raise consumer credits. Thus their spending (C) will be bigger than W . If the expenses of the budget are equal to its revenues, that is, if the budget remains balanced, the expenses of wage-earners can increase only if enterprises' expenses (I) remain below the enterprise income P . The situation is the same if the budget spending exceeds its regular net income T , that is, if G exceeds T . The amount of investments financed from the budget may grow, for example, because more is spent on road building. If, meanwhile, wage-earners do not save, that is, they buy up to the amount of their wages, I will again be smaller than P . The expenses of the budget may, therefore, also increase at the expense of I . The result will be of course the same, if C as well as G rise above W and T , respectively.

In the reverse case everything takes the opposite course. Should C and G drop below W and T respectively, I will rise above P , if for no other reason but that the stockpiling of enterprises suddenly rises. $W + P + T$ being equal to the national income, and the national income being equal to $C + I + G$, (thus $W + P + T = \text{national income} = C + I + G$), the falling of C and G below W and T is concomitant with I rising above P , but at least with P sinking below I , while in the reverse case the rising of C and G above W and T entails I falling below P and, *in that case P will be larger than I* .

At this point we shall have to stop for a moment. The raising of budget spending and that of wage-earners above their regular net income may well reduce the size of *accumulation*, but by no means that of enterprise *profit*. Profit equals the difference between the return from sales and costs — both on the micro- and macrolevels. Although the reduction of enterprise accumulation in itself lessens the difference between the return from sales and costs, the additional purchases of the budget and the overspending of wage-earners augment it. The sellers are enterprises, thus the increased purchases of the

budget and of wage-earners increase enterprise receipts. The profit of enterprises can, therefore, remain unchanged, or increase at the customary rate, while the accumulation of enterprises is slowing down.

*Purchases of wage-earners, enterprises,
and the budget, and changes in production, wages,
profit, and budget revenue*

Years	Case A						
	W	C	T	G	P	I	Y
t^1	100	100	50	50	50	50	200
t^2	110	110	55	55	55	55	220
	Case B						
	W	C	T	G	P	I	Y
t^1	100	100	50	50	50	50	200
t^2	110	115	55	57,5	55	47	220

This is the problem examined with the aid of the numerical illustration given in the Table. In case *A* the expenses of wage-earners and of the budget correspond all along to the receipts (net incomes), so that in the year t_2 enterprise profit after taxes grows, from 50 to 55 in comparison with the year t_1 . (It is because the accumulation of enterprises is growing in the meantime.) The return from sales: $(110_C + 55_G + 55_I)$, the sum of expenses: $(110_W + 55_T)$, and the profit: $220 - 165 = 55$ money units. In case *B* the consumption and purchases of wage-earners surpass their wages (C surpasses W), and the expenses of the budget surpass the revenues (G exceeds T). The purchases by wage-earners and the budget absorb a larger part of output i.e. Y (in this case, of national income at the same time) than in case *A*, $115_C + 57.5_G$ units in total, i.e. 172.5, thus only 47.5 units are left for accumulation (investment) i.e. I . The profit, however, will not be less, because the total return from sales = $115_C + 57.5_G + 47.5_I = 220$. Total costs, on the other side, amount to $110_W + 55_T = 165$. The difference between the two is 55 – the same as in case *A*. Accordingly, the profit exceeds the amount of enterprise accumulation by exactly the same figure by which $(C + G)$ exceeds the amount $(W + T)$.

The lesson to be learned is this:

– One sector can raise its purchases above its incomes only if the outlays of the other sector(s) are driven below its (their) incomes (normal receipts). The two changes must by all means level out. Total purchases must be equal to total incomes, and total expenses equal to total receipts. (We start from the assumption that every income is mediated by a purchase.)

– A stable price level can only be maintained if *overspending of one sector is accompanied by diminishing purchases of the other sector*. In a dynamical approach, this is to say that purchases rising faster than incomes in one sector are exactly

counterbalanced by purchases rising more slowly than incomes in the other sector(s). In other words: if consumption exceeds incomes in one sector, it has to remain below incomes in the other one. (See Table.) If we only examined the enterprise and budget sectors, that is, analysed a two-sector model, it would turn out that a budget deficit has for consequence that enterprise accumulation remains below the profit of the enterprise sector, or, the profit of the enterprise sector is larger than its accumulation.

If also changes in price level (and relative prices) are taken into account, it is found that the additional purchases of the household sector and/or the budget *do not necessarily* drive back the enterprise accumulation I , at least not proportionally, and their savings are not necessarily accompanied by a proportionate rise of I . (Since the additional spending or savings of the above-mentioned two sectors may trigger off changes in price level and relative prices.) Thus it may happen that the budget deficit mostly increases budget expenses just nominally which, with a given magnitude of national income, holds back enterprise accumulation in real terms to a lesser extent. Yet the statement holds by all means that, because of the budget deficit and/or the overspending of the household sector, enterprise accumulation will be – *ex post* – smaller than the enterprise profit earned, in other words: enterprise profit surpasses the accumulation of the enterprise sector on macrolevel*. The other way round, the savings of a budget with surplus and/or the household sector always entail enterprise accumulation exceeding the magnitude of the profit earned, again *ex post* and on macroeconomic level. Since the accumulation spending capacity of the enterprise sector is adjusted, apart from credits, to the magnitude of the profit earned, under the impact of overspending by the household and the state sectors the accumulation spending capacity generated will surpass – *ex post* – the magnitude of the actual accumulation, while the savings of the budget and households will force the accumulation spending capacity generated below the actually realized accumulation by an amount equal to savings.

Does it cause trouble, for example, if the accumulation spending capacity generated in the year t_1 exceeds the actual accumulation of that year? It has to be remembered that budget deficit and a possible overspending in the household sector may be of considerable proportions. And yet, an additional accumulation spending capacity does *not necessarily* lead to trouble, since

1. in a growing economy accumulation also has to grow, which involves additional demand for money. In the given case, this additional demand for money can be covered by enterprises without raising new credits.

2. It need not be a problem, either, if the accumulation spending capacity generated in the year t_1 is much more than the amount of money needed to effectuate the

*The profit of the enterprise sector will exceed accumulation by exactly the same amount as the overspending of the budget and the household sector. As opposed to the profit equalling accumulation, this profit which exceeds accumulation is embodied *in money*, that is, the profit exceeding accumulation is directly investment purchasing power. This is because a budget deficit and overspending by households cause the monetary assets of the enterprise sector to grow, without its banking debts increasing. This profit is called paper profit by Péter Erdős ([4], pp. 108–115)

accumulation of the next year. If enterprises are cost-responsive, and are compelled to economize on capital and accumulation, they will not make use of all their financial potentials to increase accumulation. They may place their "surplus" investment funds with the bank, or use it to diminish their banking debts.

Troubles may, however, be considerable if the cost responsiveness of enterprises is weak and the production units are not forced to economize on capital. In such a case, the accumulation spending capacity is by all means high in comparison with the national income, because of inefficient investment activities. And an accumulation spending power which is considerably higher than actual accumulation facilitates a *further rising* rate of accumulation. Then efficiency will deteriorate further, the ratio of consumption will decrease, and the balance of trade worsen. Under such circumstances a high accumulation spending capacity causes difficulties indeed. The oversize spending capacity may induce the economic control organs to tax away some of it, or, to constrain enterprises in the use of their investment funds. This interferes with the independence of enterprises and weakens their interest in improving efficiency, while it is exactly an improvement of efficiency, that is necessary.

It is a constantly recurring problem in the course of Hungarian economic development that the investment purchasing power of the enterprise sector exceeds the planned figure. I shall not discuss the question, whether the planned ratio of the accumulation spending capacity of enterprises has been stated correctly or not. It remains a fact, however, that the share of the profit earned has often been higher than that of accumulation. It is another fact that the profit of the enterprise sphere was of an increasing ratio in comparison with the social net income even if it had been planned to be of a stable or diminishing ratio. A highly important role was played in it by the budget deficit, in many cases of a huge amount. However, the deficit increased enterprise profit not simply because the subsidies granted to enterprises were large.* *Deficit spending in itself* can lead to a situation that profits are larger in the enterprise sphere than accumulation. What is more, if subsidies are high, but the budget is balanced, the subsidies granted to enterprises will not raise the profit by a single penny above the enterprise accumulation effectuated on macrolevel. In that case the expenses of the budget — plus the subsidies — suffice exactly to counterbalance the effect of budget tax revenues increasing the costs of the enterprise sphere. If, parallel to the elimination of subsidies, budget expenses (for example, payment of wages and the like) were to be raised so that the budget deficit would persist, it would again be found that the net profit of the enterprise sphere rises — *ex post* — above the enterprise accumulation expenses. This

*It is a general conviction that the budget inflates the accumulation spending capacity of enterprises by granting them subsidies. Just one example: "In the years 1968–1969 much more than expected profits were realized in the enterprise sphere. In consequence of increasing own resources, development activity, especially the expansion of fixed capital, suddenly increased . . . The regrouping of incomes to the sphere of enterprises, strengthened by budgetary subsidies, brought about undesirable results not only in accumulation, but also in financial processes."

again would provide an opportunity for complaining that enterprises have earned a larger profit than justified by their actual performance.*

In Hungary the state of the balance of trade and of the current account balance have been a determinant factor in the development of the enterprise accumulation spending capacity for a few years and will continue to be so especially in the coming, relatively long period. Taking this into account, it becomes even more complicated to understand the changes in the investment spending capacity, and also the central regulation of the investment purchasing power becomes a more complex task.

The balance of trade and the investment spending capacity

As long as foreign trade has not been considered, national income has been identified with the incomes of the enterprise, the household and the state sectors, that is, with the sum $(P + W + T)$ in which P and W are incomes after taxes. Or, the national income could be considered identical with the expenses of the three sectors $(I + C + G)$. Care has to be taken, however, not to consider twice the expenses related to redistribution. (For example, the payment of wages by the budget should not be considered once as a budget expense, and again as a household expense. For simplicity's sake, wages paid by enterprises and purchases from wages will be connected to W and C , while G will be discussed simply as the purchase of commodities and services by government.)

If foreign trade is taken into account — disregarding for the moment the international transfer, and thus also the interest to be paid on capital imports — Y , i.e. national income cannot be equal to $C + I + G$, because foreign trade practically never shows a zero balance. With foreign trade taken into account, the national income i.e. $Y = C + I + G + (E - M)$, in which E stands for exports, M for the import price total, and $C + I + G + (E - M)$ represents the amount of the national income expressed in the prices of a given year (for example of the year t_1). $(E - M)$ represents in it the balance of trade, and $C + I + G$ the domestic consumption (use) of the national income. (The balance of trade includes in this instance the balance of exports and imports of commodities and services.) If the balance of trade shows a surplus, then domestic consumption remains below the national income, that is to say, $(C + I + G)$ is smaller than Y . This is a so widely known fact, that it is not worth further discussing the idea.

*The budget deficit would not increase the profit of the enterprise sphere, should the net savings of the household sector counterbalance this deficit. Nor would the growing budget deficit increase the profit of enterprises, if household savings grew to the same extent as does the deficit. Nevertheless, a large deficit or its *considerable* growth usually increases enterprise profit, since the *net* saving of households and its yearly growth is not of a high amount. This is because some people increase their deposits with the savings bank, or their money stock, while others raise hire-purchase, home-building, or character (personal) loans.

New and important conclusions may be reached, however, if we transform the equation $Y = C + I + G + (E - M)$. Let us deduct the budget revenues from both sides, and we get the following equation:

$$Y - T = C + I + G - T + (E - M)$$

It is well known that if wages are equal to the consumption of wage earners, that is, if household savings amount to zero, the profit will be equal to the difference between national income and taxes + wage-earners' consumption, that is, to the value $Y - (T + C)$. Following another rearrangement of the equation, we get on the left-hand side:

$$Y - T - C = I + G - T + (E - M)$$

Since $Y - T - C = P$, the following equation is obtained after transferring I to the left-hand side:

$$P - I = G - T + (E - M)$$

and from there, we can arrive at the equation

$$E - M = (P - I) + (T - G)$$

The latter equation states no less than that the export surplus *must be counterbalanced by the surplus profit of enterprises exceeding accumulation* (that is, enterprises can accumulate less than their profit), *as well as by the surplus revenue of the budget*. Let us assume that the budget is balanced. In that case, enterprise accumulation will be less than enterprise profit by the amount of the export surplus. And, if enterprise profit is equal to enterprise accumulation (of course, profit always means net profit, since it is $Y - T - C$), the *budget surplus* will have to counterbalance the export surplus. Therefore, if in the enterprise sector $P = I$ and wage-earners' saving also amount to zero, then any size of foreign trade surplus will be reflected in the same size of a budget surplus. In the case of a deficit in the balance of trade the situation is the reverse. In such case, with a balanced budget, accumulation will exceed the profit of enterprises. That is to say that if, on the national economic level, enterprise profit is equal to enterprise accumulation, the budget will close with a deficit, of exactly the same amount as was the deficit of the balance of trade. Enterprise profit may be, of course, larger than enterprise expenses on accumulation even with a deficit in the balance of trade. This is the case when the budget deficit exceeds the deficit of the balance of trade. And all this is further complicated by the saving or overspending of wage-earners. The amount of the latter is usually low in comparison with the budget balance and the balance of trade, if it is the *net saving* of wage-earners that is taken into account. And yet household savings can play a role in straightening out the balance of trade: if it shows a surplus, wage-earners must —

ceteris paribus — save some of their earnings, if it shows a deficit, wage-earners' spendings may be in excess of the amount of their regular net income (wages). Taking this into account, the following equation is obtained:

$$E - M = (P - I) + (W - C) + (T - G)$$

This is to say that the surplus of the balance of trade must be equal to the sum of unspent enterprise profits, and the savings by the budget and wage-earners.

All this leads to the conclusion that, should the balance of trade show a deficit, domestic consumption can grow *faster* than national income. In this case, accumulation can grow at a faster rate than profit, and household consumption may also grow faster than real wages, and also the budget can finally show a deficit. Conversely, if there is an export surplus, domestic consumption can grow only more *slowly* than national income. This involves that in the case of a balanced budget, enterprise accumulation will be growing more slowly than profit, or perhaps accumulation will not grow, while profit will. If profit grows at the same rate as accumulation, a budget surplus is bound to develop. As long as the export surplus remains, also the budget surplus, unspent enterprise profits and perhaps wage-earners' savings, too, must persist, totalling an amount equal to the value of the surplus of the balance of trade.

Instead of profit, we can say again investment spending capacity. (Disregarding credits influencing investment spending capacity.) Thus the surplus of the balance of trade is a determinant factor of the investment purchasing power exceeding accumulation of the enterprise sphere. If the budgetary and household savings jointly amount to zero, the accumulation spending capacity generated will exceed — *ex post* — the actual accumulation exactly by the amount of the export surplus. (And the deficit of the balance of trade will press — *ex post* — the accumulation spending capacity generated below the actually effectuated accumulation exactly by the amount of this deficit.) Therefore, a trade surplus threatens with an exceedingly high rise of enterprise investment — especially if the cost-responsiveness of enterprises is low —, as does a budget deficit or overspending by households. (The other way round: the deficit of the balance of trade makes it more difficult to maintain enterprise accumulation achieved earlier — again in the case of a zero amount of budgetary and household savings —, thus the accumulation once achieved can only be maintained, or even raised, by granting more credits to enterprises. (Finally, a surplus of the accumulation spending capacity (profit) generated by an active balance of trade is not necessarily reflective of the efficient activities of the enterprise sector as a whole, in the same way as a surplus to be traced back to a budget deficit. It is because surplus of the balance of trade can also be achieved through high state subsidies to exports, or through a considerable devaluation of the domestic currency. (In that case, of course, it is not only the surplus of the balance of trade, but also the budget deficit that increases the accumulation spending capacity of enterprises.)

At this point, the analysis of foreign economic effects cannot yet be ended, since the matter is further complicated by the *international income transfers*.

**The current account balance of payments and
accumulation spending capacity**

The international income transfers include payments of wages, dividends and interests directed to or coming from foreign countries. In the following we shall speak mainly of interest payments, since in Hungary the overall majority of transfer payments is made up of interest payments. International income transfers are registered in the current account balance of payments, that is why the subject is analysed under the heading "The current account balance of payments and accumulation spending capacity".

Let us denote the net amount of interest payments directed to or coming from foreign countries by R . R may have a positive or a negative sign, depending on which is larger: the amount of interest payments directed to or of those received from foreign countries. In the latter case, R has a positive sign and augments the amount of disposable national income, in the former case it has a negative sign. Let us start from the equation

$$Y = C + I + G + (E - M)$$

And now we shall take into account also the value of R and add it to both sides of the equation. Thus the equation

$$Y + R = C + I + G + (E + R - M)$$

is arrived at, of which $(E + R - M)$ already includes the whole current account balance of payments. After deducting the amount of budget revenues, i.e. the amount of taxes from both sides, the following equation is obtained;

$$Y + R - T = C + I + G - T + (E + R - M).$$

For simplicity's sake, let the consumption and purchases of wage-earners be equal to the amount of wages and salaries, that is to say, let them have no savings. $Y + R$ is nothing else but the disposable national income* corrected for international interest payments. If we deduct from it the amount of taxes, as well as the amount C assumed to be equal to wages, the net profit after taxes is obtained. Then, if C is transferred to the left-hand side of the equation worked out above, this left-hand side will express exactly the size of the net profit:

$$Y + R - R - C = P = I + G - T + (E + R - M)$$

*The disposable national income differs from the national income produced in the same way as GNP differs from GDP in Western statistics. The GNP includes, namely, the international income transfers. In a few countries – in which large sums of interests are paid out to or received from foreign countries – the difference between GNP and GDP is quite considerable. Certain countries (for example, Pakistan and Turkey) earn a considerable income from wages remitted (by guest workers) to the home country. In Hungary, the use of the concept of disposable national income has been suggested by László Drechsler [2]. For more on the difference between GNP and GDP see [1].

Rearranging the equation $P = I + G - T + (E + R - M)$, it can be formulated as follows:

$$E + R - M = (P - I) + (T - G)$$

The equation is expressive of the fact that the *current account balance of payments* has to tally – *ex post* – exactly with the surplus expenses or receipts of enterprises, and with the budget balance. (If the wage-earners' savings amount to zero.) As for the surplus receipts or expenses of enterprises: in the case of the former, profit is larger than accumulation, and in the case of the latter, profit will remain below the size of enterprise accumulation. The inclusion of R calls forth an essential change: in this case, the surplus of the balance of trade alone provides no information on the development of the value $(P - I)$ and/or of the budget balance.

Everything depends on the sign of R . If R is of a *positive* sign and the balance of trade shows a surplus, all that has been said about the balance of trade asserts itself with an even higher intensity: the surplus of enterprise profit over enterprise accumulation will be even higher, or the budget balance may close with a high surplus. If, on the other hand, R is of a *negative* sign, a high surplus of the balance of trade notwithstanding, the accumulation of the enterprise sphere may be near to the profit, even if budget revenues and expenses are balanced. It is not $(E - M)$, but $(E + R - M)$ that has to be equal – *ex post* – to $(P - I) + (T - G)$.

It requires a more detailed explanation how enterprise accumulation can be near to profit, and budget expenditure to budget revenues, with a surplus in the balance of trade – even if the surplus is high. *What kind of mechanism* guarantees that, while there is an export surplus, accumulation can be as much as, or possibly more than, profit, and budget expenditure can be of the same amount as budget revenue.

A solution to the question can be found if the development of the budget, of sales returns, as well as of costs are examined from the aspect how they react on transfers directed to or coming from foreign countries.

Foreign trade infers the purchase and sale of foreign exchange. Let these transactions take place at the National Bank of Hungary, in the following to be called briefly: the bank. In the case of exports enterprises sell (for simplicity's sake the role of foreign trade enterprises is not investigated) the foreign exchange received to the bank, at the official exchange rate, and in the case of imports they buy foreign exchange from the bank. Expressed in forints, these belong to the general receipts and expenses of enterprises, are parts of their returns from sales as well as of their costs and accumulation expenses – we need not discuss them any further. It is, however, not enterprises that buy foreign exchange if interests are to be paid to foreign countries. The expenses concerned with interest payment debit the budget, since foreign loans are raised by the government, that is, *interest charges are items of budget expenses*. Let us assume that, because of a surplus of the balance of trade, budget expenditure has been so planned that the budget shows a surplus, without the interest payments. However, because of interest payments to foreign countries, the amount of the budget expenses grows, whereby the budget

surplus diminishes or disappears altogether, and even a deficit may be incurred. This *half* answers the question why the value $(P - I) + (T - G)$ can be low, while the export surplus is high, but interest has to be paid, that is, if the value of $(E + R - M)$ is near to zero. It is because in such a case the budget may be even balanced.

But then also the value $(P - I)$ has to be low, not only the value $(T - G)$. We have seen that the export surplus augments — *ceteris paribus* — the value $(P - I)$. And the budget surplus itself reduces the value $(P - I)$. If the budget is balanced, then — in the case of a high export surplus — the value $(P - I)$ must be big. Yet it is not indifferent, in which way the budget gets balanced. If the tax revenues are not balanced by the “regular” expenses of the budget, but by its interest payments to foreign countries, for the enterprises it is of the same effect as if the budget closed with a deficit: of budget expenses, only the part above R increases the receipts of enterprises, while taxes (T) increase the “costs” of enterprises in their total amount. Maybe, because of R , neither $(T - G)$ nor $(P - I)$ will have a positive sign, in spite of an active balance of trade. Because of R , if it is of a negative sign, both sides of the equation $E + R - M = (P - I) + (T - G)$ are reduced exactly to the same extent, what is more, both sides may even assume a negative sign, in spite of a considerable surplus of the exports of commodities and services. If the amount of the export surplus is higher than that of interest payments, then, of course, $(P - I) + (T - G)$ will be bigger than zero, which can easily be demonstrated with the aid of the mechanism presented above. Widely different variations exist. If the value of $(E + R - M)$ has a positive sign, enterprises will realize a *profit surplus* over their accumulation expenses (with a balanced budget). If, in addition, the budget balance shows a deficit, the surplus profit may be rather high, especially if wage-earners have no savings.*

*This can be related to Kalecki's profit theory. If we start from the equation $Y = C + I + G + (E - M)$ and add R to both sides, while deducting the value of W and T , we shall get the equation

$$Y + R - W - T = C - W + I + G - T + (E + R - M)$$

The left-hand side of the equation is equal to P . Transforming the right-hand side to some extent, yet not changing its value, the equation

$$P = I + (C - W) + (G - T) + (E - M) + R$$

is obtained. Verbally this means that on the national economic level profit is equal to enterprise accumulation plus wage-earners' spending above wages plus the budget deficit plus the export surplus plus the net receipts from international transfers. $(C - W)$, $(G - T)$, $(E - M)$, and R may have negative signs, in which case they *reduce* the size of profit on the macro- i.e. on national economic level. That is, the profit may be *either lower or higher than I*. R may reach a high figure. (In Hungary, it is not of a negligible size.) All this means that *Kalecki's profit theory must be completed with R*, since budget expenses include interest payments to foreign countries. (If the budget is examined *without the item of interest payments*, the completion is *not necessary*.)

The fact has to be stressed that if the desirable development of budget revenues and expenses is examined together with the foreign transfer payments, then — in the case of a foreign trade surplus — the budget can be balanced or near to a balanced state *with the interest payments included*. In respect of the normal revenues and expenses of the budget, however, *surplus rather than just a balanced state* has to be striven for, in order that the enterprise profit earned should not too much exceed the accumulation of the enterprise sector. If foreign interest changes are listed under budget expenses, these can, of course, counterbalance the normal revenues, but can counterbalance them only in this way. To bring about an equilibrium *of such content* is a task just as difficult as it is to bring about a budget surplus in respect of the normal revenues and expenses of the budget. And, in a country where R is of a positive sign, i.e. where income from interest payments is earned, it is quite easy to reach a combined budget balance, as well as an income surplus with the usual items. (If the state is the lender and the state earns the income of interest payments.) In Hungary, however, R has a negative sign.

If, after all, we wish to link international transfers with the problem of investment purchasing power, the following statement is to be made: If the budget is balanced *with the interest charges included*, and the balance of trade closes with a surplus, then — in case of R with a negative sign — the investment (accumulation) spending capacity generated *ex post* will exceed the accumulation of the enterprise sphere only by as much as the balance of trade exceeds the value of R to be paid to foreign countries. That is to say, the value $(P - I)$ is not influenced by the balance of trade but by the *current account balance of payments*. The same has to be said if R has a positive sign. If the budget is balanced *with the incomes from interest payments included*, R is not to be deducted from, but added to the balance of foreign trade. That is, if the balance of trade closes with a surplus, the accumulation spending capacity of enterprises will not be increased by this value alone, but, in addition, by the value of R . *The surplus of the full current account balance of payments* has to be taken into account. Thus the investment (accumulation) spending capacity may very considerably exceed the size of actual accumulation. We Hungarians shall have, unfortunately, to struggle with such difficulties yet for a long time.

Summing up: R renders the development of the accumulation spending capacity more complicated. To make things easier, we should think according to the following pattern: a) If the accumulation spending capacity is connected to the *current account balance of payments*, the budget balance is always to be understood *with the interest item included*. b) If the accumulation spending capacity is analysed in combination with the balance of trade, the budget balance is to be analysed without the interest item. (In the case of a balance of trade surplus of 10 thousand million, the accumulation spending capacity generated *ex post* will correspond to accumulation, if the budget closes, in respect of its *regular incomes and expenses*, with a surplus of 10 thousand million.) c) Finally, it is useful to consider, in which way R leads from the balance of trade to the current account balance of payments, and conversely.

**Development of the accumulation spending capacity
in Hungary – Problems of the present and the future**

Since 1979 a restrictive economic policy has been pursued in Hungary, which is to be traced back directly to the deficit in the balance of trade. This policy belongs to the "consolidation" period prolonged much beyond expectation. (I cannot discuss here the causes of this prolongation, or whether it is correct here to use the term "consolidation period.") Within the scope of restriction, the rate and volume of accumulation have been falling considerably year by year since 1979, on a yearly average by about Ft13–14 thousand million, at 1981 prices. This represents one of the most serious difficulties.

In the first part of this article I have demonstrated that profit is – *ex post* – equal to the accumulation effectuated, and that the accumulation spending capacity is of the same size every year – with newly raised credits excluded – as was the profit earned in the previous year. Exactly for this reason, being forced to reduce accumulation, enterprises dispose year by year of an investment purchasing power larger than the accumulation that can be realized in view of the requirements of external equilibrium. At the same time, well justified investment *demand* may be high. If the risk of investment is minimum in the enterprise sphere, enterprises can hardly wait to exploit the "superfluous" investment spending capacity generated. It presents another problem how to prevent a full utilization of the investment spending capacity centrally: subsequent central interventions always have harmful consequences. It is true, though, that the continuous inflationary rise in prices reduces the investment spending capacity year by year, so that a normal rise in investment costs may absorb the entire nominal surplus of the purchasing power. At the same time, the "superfluous" purchasing power itself may call forth a rise in prices, so that while the whole nominal accumulation spending capacity is utilized, the real value of accumulation will be lower than that of the previous year. However, inflation causes trouble in itself; further, nothing guarantees that inflation will absorb the entire nominal surplus purchasing power. Therefore, central intervention follows once again, enterprise independence will be further constrained, new troubles will arise in external equilibrium, and even shortage phenomena will proliferate. In the last years, since 1979, central management organs in Hungary could have a reason for complaining about the "unexpected rate" of the accumulation spending capacity of enterprises mainly because the rate and extent of accumulation *have been diminishing*. In such a case, it usually presents a difficulty that the investment purchasing power is larger than what the *actual* accumulation can be. This is what has to be noted: in a period of restriction, the presence of a "superfluous" accumulation spending capacity is a matter of course.

As long as the rate and extent of accumulation had not been diminishing, i.e. up to the end of 1978, the "exaggerated" rate of enterprise accumulation spending capacity was to be traced back to two main factors: 1. enterprise investment activity of a poor and even deteriorating efficiency, the underlying management system, and the financial practice, 2. the budget deficit. If the budget deficit increases the profit of the enterprise

sector, it also increases the accumulation spending capacity of enterprises. The accumulation spending capacity of the enterprise sphere does not heed such central admonishments as: "enterprises again earned higher profit than what their actual output would have justified." It has to be noted that if there is a budget deficit or the deficit is on the increase, the enterprise accumulation spending capacity is *ex post* already bigger than accumulation, and in the case of an increasing deficit, it will be bigger to an increasing extent.

At present as well as in the following years or even through the following decade, we are and shall be striving — according to the central conceptions — after a considerable *export surplus*, amounting to \$7–800 million. (In my personal opinion, to attain such surplus requires extreme efforts from the Hungarian national economy, hardly bearable through a long period. I admit, however, that an export surplus of \$5–600 million will have to be realized by all means. Since I cannot analyse this question in the present paper, I shall take into consideration the \$800 million export surplus officially qualified as necessary and to be attained.) With the present exchange rate of the dollar, this will produce a surplus enterprise accumulation spending capacity of almost Ft35 thousand million, if household savings amount to zero, and the budget is balanced in respect of its regular revenues and expenses. If, in addition, the volume of accumulation has to be reduced, too — which is not entirely impossible in the next one or two years — the surplus accumulation spending capacity may even exceed Ft35 thousand million.

Let us now consider only the effect of the balance of trade surplus to be achieved. If, *ceteris paribus*, the regular revenues and expenses of the budget were balanced, a surplus accumulation spending capacity of Ft 35 thousand million would have to be reckoned with. This might to some extent be reduced by household savings, counterbalancing, however, only a relatively small portion of the Ft 35 thousand million surplus, so that the surplus would probably still reach Ft 25 thousand million. (For simplicity's sake, foreign trade settled in roubles and dollars has been combined.) In this case, a surplus enterprise accumulation spending capacity could not be avoided, unless, in respect of the regular budget revenues and expenses, a surplus revenue amounting to about Ft 25 thousand million could be achieved. Of course, if the volume of accumulation can be permitted to grow, the surplus of budget revenue can be smaller, but only if the amount of *net* credit granting to support accumulation of the enterprise sector is zero. The point is that in the coming years it will not be enough to strive for a balanced budget. In respect of the *regular* items of revenue and expenditure, a *considerable surplus* revenue is to be achieved. A balance of trade surplus, and in this context a budget surplus must be achieved because of interest payments to foreign countries. Therefore, it may be said that the reason why efforts must be made to achieve a considerable surplus of the balance of *foreign trade* is that the current account balance of payments should be in equilibrium, or should close with a certain amount of surplus. (In the latter case, also an increase of foreign exchange reserves and a reduction of the foreign debt stock become possible.) And the surplus revenue in respect of the *regular* revenues and expenses of the *budget* is needed in order that the budget, including also interest payments to foreign countries,

should not close with a deficit. In this case, the accumulation spending capacity of the enterprise sector is justly expected to be of adequate dimensions, and the accumulation not to run counter to the national economic requirements of external equilibrium.

If the investment purchasing power were considerably higher than the permissible amount of investment, it would have to be taxed away centrally again, or the enterprises' right to dispose of the accumulation spending capacity would have to be curbed. It is well known from practice that such measures would be contrary to the spirit of reforming the economic mechanism. Accumulation spending capacity would be taxed away also from where it ought to be increased, the interest of enterprises in increasing profit would be diminished, the principle of profit incentive would be repeatedly infringed upon. Enterprise independence is further constrained by the obligatory reserve building from the accumulation spending capacity. The idea can fully be approved that it is the *generation* of superfluous purchasing power that has to be prevented, and it is not right to tax it away subsequently. For this end, however, the mode of regulation of the accumulation spending capacity must be known. Also, it has to be known that in the case of a balance of trade surplus, and with a zero amount of household savings, the accumulation spending capacity can only be kept between the desired limits – without having to expect a considerable expansion of the shortage phenomena and/or accelerated inflation – if the surplus of foreign trade is counterbalanced by the *surplus revenue* of the *regular items* of the budget. It is true that if the Hungarian enterprises were cost-responsive and compelled by the market to economize on their capital, the surplus of accumulation spending capacity would not present a *serious* problem, and it would not be so very important to develop this budget surplus. For the time being, however, we cannot rely on the *market to exert a pressure on* enterprises. This also makes it clear how very important it is to carry on steadily with the reform of the economic mechanism.

The enterprises' accumulation spending capacity can be regulated, "only" the credits granted to enterprises must be kept between strict limits, "only" the balance of the regular budget incomes and expenditures has to be adjusted to the balance of trade, "only" care must be taken in the case of an about \$800 million export surplus of commodities and services a budget surplus amounting to about Ft 35 thousand million should be achieved, not counting household savings. With such an amount of surplus, we need not be afraid that an accumulation spending capacity inflating profit is earned by the enterprises. Such surplus is, however, very difficult to attain. A surplus can be achieved by *increasing* revenues, but this is a very difficult task in a stagnating economy. A surplus can also be achieved by reducing budget expenditure, but which expenditure items can be reduced without any harmful consequences? Social needs demand, namely, exactly the increase of expenses. (See pensions, welfare benefits, teachers' salaries, costs of infrastructural development, etc.) Thus the way how to develop a surplus needs careful analysis. This makes it clear that regulation of the investment purchasing power is not merely a problem of finances and budget techniques, and not only a question of reconciling credit granting with the balance of trade, the current account balance of payments and the budget, but in addition to these, it is first of all a *social problem*. A lot

depends on whether we are able to develop new reflexes instead of the old ones. (For example, whether we shall be able to grant credits on strict business considerations within reasonable monetary limits, instead of making decision on financing according to whether the credit application of the enterprise is in conformity with the plan conceptions. It is, therefore, important to know the factors determining the development of the investment purchasing power, yet it is even more important that the economic control and management agencies possess the necessary determination to take the required measures.)

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АКТУАЛЬНЫЕ ТЕОРЕТИЧЕСКИЕ ВОПРОСЫ ИНВЕСТИЦИОННОЙ ПОКУПАТЕЛЬНОЙ СПОСОБНОСТИ

Т. ЭРДЕШ

Автор анализирует факторы, определяющие инвестиционную покупательную способность предприятий, исходя из макроэкономических аспектов, и рассматривает в первую очередь покупательную способность, поражаемую накоплением. Он прежде всего указывает, что если абстрагироваться от бюджетного и внешнеторгового сальдо, а также от сбережений населения, то отправной точкой того, как складывается покупательная способность накоплений предприятий, служит их прибыль за предшествовавший год, однако покупательная способность накоплений текущего года зависит также от полученных предприятием кредитов. Размеры прибыли зависят от фактических накоплений предприятия. Из этого следует неожиданный парадокс, а именно: чем эффективнее хозяйственная деятельность предприятий, тем ниже покупательная способность накоплений предприятий по отношению к национальному доходу при данных темпах роста.

Высокая покупательная способность накоплений, таким образом, на макроуровне не всегда отражает эффективную деятельность предприятий. Остальные факторы, определяющие покупательную способность накоплений, — это бюджетное и внешнеторговое сальдо, а также сбережения населения. В Венгрии фактическая покупательная способность накоплений предприятий, как правило, превышала запланированную потому, что дефицит госбюджета достигал значительной суммы. В последнее время подобное влияние оказывает актив внешнеторгового баланса. Автор доказывает, что образование чрезмерной покупательной способности накоплений предприятий в ближайшие годы можно предотвратить лишь в том случае, если государственный бюджет из года в год будет сводиться со значительным активом в отношении обычных поступлений и расходов, и для этого недостаточно лишь ликвидировать различные бюджетные дотации, выплачиваемые предприятиям.

SECTORAL AND ENTERPRISE STRUCTURE OF NET EXPORTS SETTLED IN CONVERTIBLE CURRENCY OF THE HUNGARIAN INDUSTRY

Á. TÖRÖK

Restoration of equilibrium of the upset balance of international payments in convertible currency has become a key problem of Hungarian economic development. The author examines on the basis of data of industrial enterprises subordinated to the Ministry of Industry (contributing more than 80 percent of the Hungarian export of manufactures sold in non-rouble markets) how the Hungarian large-scale industry served the solution of this task between 1970-1982. His computations show that the Hungarian industry as a whole was incapable of promoting a solution of this task. Relying on his analyses by branches of industry and enterprises the author draws several conclusions regarding the causes and the indispensable changes in structure.

Changes in time of the export structure provide important information on ways how an economy tries to accommodate itself to structural processes in world trade and to international trends in demand. In this approach it does not even seem necessary, in general, to examine whether transformation of the export structure imposes new burdens on foreign economic relations of the country by raising new demands on resources. Namely, in case of countries following an economic policy fully considering foreign economic effects it is probably self-evident that the export and income surpluses resulting from structural transformation will exceed additional input requirements (partly of foreign origin).

The traditional way of approach to the export structure, i.e. examination of the distribution of exports by branches, industries or major product groups thus also indicates income formation processes motivating structural transformation. This, however, may not be supposed if the country examined allows effects of foreign origin to assert themselves only through considerable filtering devices domestically and if viewpoints of export profitability are pushed into background for various reasons (e.g. indebtedness, autarkic economic development strategy, viewpoints of safe supply strictly observed in the domestic market of raw materials and industrial goods, etc.). In such a case it is no more excluded that exports with low, what is more, even negative profitability are transacted, too, because exports are qualified and maintained first of all not on the basis of their income-creating ability and efficiency, but on that of earning *foreign exchange*. In the Hungarian economy of the early 1980s there is undoubtedly

such a situation for various reasons,* since fulfilment of the foreign exchange earning function has for a long time been the primary requirement raised towards exports to the West.

The most reliable information on fulfilment of the foreign exchange earning function is given by the indicator of net exports settled in convertible currency, indicating the difference between exports and *imports* by branches and enterprises, respectively. An exact interpretation of the indicator of net exports and imports should be given yet. Distinction can be made between *direct* and *total* net exports and imports, respectively. *Total* net exports or imports (this indicator is used by Éva Várhegyi in her article examining the effects of individual industrial activities on the balance of Hungarian foreign trade [2] include the direct net exports or imports of a given branch or enterprise plus the indirect net exports or imports realized through the sale of their products to other Hungarian enterprises and purchases from them. This may also be called a *national economic balance approach* because it shows the effects of sectoral and enterprise producing activity on the foreign exchange balance of the national economy. This approach has a double disadvantage: on the one hand, computation material required for it may only be obtained from input-output tables of the national economy, which, however, are rather outdated and do not include data at enterprise level. On the other hand, such processes are shown which may only partially be perceived by the enterprises since indirect exports or imports are often realized through transmissions the given enterprises will not even know of.

The indicator of direct net exports or imports, however, only includes direct turnover realized by the given branch (sector) or enterprise. Here we can speak about a *foreign trade structure approach*, since decisions of the enterprise do directly influence the development of net turnover here and thus also the structure of net exports or imports at national economic or sectoral level. In the following exclusively this latter approach will be used in this study.

The double role of convertible currency

By analogy to the term "resource constrained", the Hungarian economy may perhaps be called an "import constrained" economy first of all as regards non-rouble foreign economic relations. Just as in other socialist and capitalist countries in a similar situation, convertible currency to be obtained through export of goods and services and, temporarily, through credit, has a double role in economic development. It is simultaneously qualified as a scarce *resource* (to be converted into production factors — capital, technology, eventually skilled labour) and a *priority objective of production and management*. In the first approach it may seem, therefore, that the desirable direction of transformation of the export structure is development of sectors and enterprises capable

*This is verified by computations — among others — in an article by I. Hamar [1].

of exports with the largest possible (net) convertible currency returns. It may not be disputed that in import constrained economies an analysis of the export structure in itself is not necessarily sufficient and a comprehensive picture may only be obtained by a review of the structure of net exports. In the study attempts will be made in this direction. Yet it may by no means be stated that the possible largest net exports to the West alone may qualify various sectors, branches or enterprises. Namely, for exports with large net convertible currency returns also inputs other than imports against convertible currency are required and, in general, exports to the West are not the only output. Over and beyond certain limits other inputs may not be increased, nor can other outputs be decreased. Barriers are raised, on the one hand, by indebtedness to CMEA-countries or domestically, and, on the other hand, by such shortage phenomena proliferating on the domestic market that may no more be tolerated by economic or political authorities supervising the given enterprise.

Nevertheless, some relationship between net convertible exports* as well as the economic positions of enterprises and branches, may still be found. This is by far not a direct correlation and in the majority of cases not even of a positive direction. It is worth examining this problem more thoroughly, simultaneously revealing also some reasons lying behind some less known or emphasized structural particularities of net convertible currency exports of the Hungarian industry.

The examined sphere of branches (sectors) and enterprises

In the study data are not given for the entire Hungarian export of industrial products, but only for exports of the Hungarian industry. The difference between the two kinds of export results from the export of industrial products by non-industrial enterprises (e.g. farms or servicing units). However, this difference is not considerable in the export of industrial products against convertible currency. Furthermore, data of such industrial enterprises are not included, either, which are not supervised by the Ministry of Industry. Therefore, from the sphere of examination the food industry, a great part of building material and ceramic industries as well as of timber industry, etc. have been left out. We have not succeeded in obtaining data on all enterprises supervised by the Ministry of Industry, either, but only smaller ones were left out. In 1979 and 1980 135, in 1981 158 and in 1982 160 industrial enterprises were included in the sample examined. These enterprises produced 93.7 percent of the total non-rouble exports of enterprises under the supervision of the Ministry of Industry (2028.7 million U\$D) in 1981 and 92.6 percent (1953.6 million U\$D) in 1982. These exports amounted to 47.3 percent of Hungary's total non-rouble exports in 1981 and to 46.4 percent in 1982, i.e. to more than 80 percent of Hungarian non-rouble exports of industrial products (excluding food industry exports).

*In the following this term will be used for "net exports settled in convertible currency".

On the basis of the above ratios it seems that the sphere examined is rather wide. Therefore, the conclusions to be drawn may probably be considered as being valid for the entire Hungarian non-rouble export of industrial products.

Economic policy environment and net exports

During the four years examined working conditions of Hungarian industrial enterprises deteriorated, because economic policy and the system of regulators more and more tried to mediate toward them effects of the generally ever deteriorating foreign economic development. This goal should have been achieved first of all by means of the new price system introduced at the beginning of 1980, aimed at the simulation of world market competition [3], but it turned out that its negative effects were on the whole stronger than the positive ones and they did not at all serve the fundamental economic policy objective, namely, improvement of the equilibrium of the national economy in its foreign economic relations. The new price system resulted in that most enterprises became interested in reducing the volume of exports settled in convertible currency and, at the same time, also their world market competitiveness diminished considerably when they had to take over raw and basic materials of CMEA or domestic origin (e.g. domestic metallurgical products) at prices said to be world market ones.*

On the other hand, in the period between 1979–1982 the economic control organs had continuously striven after more and more delimiting wage-increasing and investment possibilities of enterprises, i.e. the outflow of purchasing power from the enterprise sphere. This endeavour reached its goal only partially. Yearly reports on the fulfilment of national economic plans indicated after almost each of the four years that the growth rate of industrial wages had exceeded planned ones and it turned out that the central curbing of enterprise investment activity could not be successful under the given circumstances, because it largely increased the stock of unfinished investment. [7]

Parallel to the central intention to restrict the outflow of purchasing power an almost fully opposite endeavour was more and more enforced in the period examined. This promised special treatment to enterprises increasing their exports against convertible currency. They were given preferential wage-increasing possibilities and were granted development credits amounting to 6–7 percent of the yearly investment volume for the increase of Western exports. Together with this, exemptions from the new price system became more and more frequent, first of all if enterprises promised to increase Western exports in compensation for special treatment. No doubt, exports settled in convertible currency have been made a preferential target by economic management because of the fast increase of indebtedness and payment difficulties. Nevertheless, increasing enterprise

*On harmful effects of the new price system see [4, 5, 6].

interestedness in direct exports against convertible currency was in many cases contradicting short-term goals of the national economy. With applications for export development credits (in Western relation) it was a frequent case, for example, that enterprises tried to obtain money in this way for their development goals that could not be realized otherwise [8], and, instead of increasing their exports against convertible currency* they referred to goals as import-substitution, etc. Because of interestedness in direct convertible exports sub-contractor's relations between Hungarian enterprises were often neglected and semi-finished products exported to the West had to be purchased by other Hungarian manufacturing enterprises from Western imports - often at higher prices than the exporting enterprise sold it abroad.

Net convertible exports of the Hungarian industry thus developed under the above circumstances during the four years examined. In order to be able to interpret the data given below it is important to draw attention to the fact that interestedness of the individual enterprises was attached to direct convertible exports. However, to increase direct *net* exports against convertible currency was no more the interest of enterprises, because they had to produce Western exports, while Western imports were dependent on license. The first depended on the performance of the enterprise, while the second rather on its bargaining power with the Ministry of Foreign Trade and the National Bank. Thus - to quote a fictitious example - an enterprise could more easily realize an increase of its exports by 1 unit without any increment in Western imports than to increase exports by 5 units together with an increase of imports by 1 unit. In the latter case the enterprise would perhaps have earned greater acknowledgement (and more wage-increasing possibilities) from its supervising authority, but for this also an import license ought to have been acquired, which, however, would have been rather difficult.

Thus, the net convertible exports of branches and enterprises did not increase on their own initiative as against direct convertible exports, but because they had to decrease their direct imports settled in convertible currency. This was a *necessity* - of course, to an extent differing by branches and enterprises - but they could already decide themselves on the increase of direct convertible exports within the rather limited scope of decisionmaking determined by the rules of the new price system, viewpoints of profitability and capacity utilization, input-increasing possibilities from CMEA-imports and the domestic market, as well as - against all these - the wage-increasing possibilities and other facilities.

Table 1 gives a summary of the processed sample of enterprises by branches. Where it was possible, branches representing a vertical production complex were grouped under each other. The column of "Other industries" is a remainder and summarizes data of some paper and furniture manufacturing, printing, ceramic and writing materials producing enterprises. This is, however, important only for the total sum, since none of these enterprises represents a determining weight within its industry, thus cannot characterize it.

*For short henceforth: "convertible export"

Table 1
Direct imports settled in convertible currency (I\$), direct exports against convertible currency (E\$) and balance of direct turnover settled in convertible currency (B\$) in the sample examined (1979–1982, million dollars), by branches of industry

	I\$	1979 E\$	B\$	I\$	1980 E\$	B\$	I\$	1981 E\$	B\$	I\$	1982 E\$	B\$
Textile industry	147.9	134.9	–13.0	144.1	117.7	–26.4	200.7	114.5	–86.2	158.5	104.4	–34.1
Clothing industry	21.0	44.4	+23.4	20.4	45.0	+24.6	25.3	61.6	+36.3	21.7	52.8	+31.1
Metallurgy	219.8	539.7	+319.9	247.6	550.7	+303.1	228.8	450.6	+221.8	173.5	395.5	+222.0
of which												
Aluminium industry	35.7	151.4	+115.7	46.7	195.5	+148.8	29.9	164.2	+134.2	20.8	120.7	+99.9
Metal processing	9.4	19.2	+9.8	9.0	20.5	+11.5	15.8	21.8	+6.0	16.0	18.6	+2.6
Engineering industry	428.5	640.6	+212.1	453.2	709.5	+256.3	454.6	679.0	+224.4	467.8	711.3	+243.5
Oil, gas	279.1	170.6	–108.5	118.5	225.6	+107.1	74.5	194.1	+119.6	78.3	191.9	+113.6
Electric energy	12.5	1.3	–11.2	18.3	6.0	–12.3	9.3	10.4	+1.1	6.6	0.8	–5.8
Chemical industry	381.8	390.2	+8.4	470.4	456.5	–13.9	491.0	460.2	–30.8	480.5	444.6	–35.9
of which												
Rubber industry	65.7	42.9	–22.8	84.9	55.6	–29.3	76.1	42.6	–33.5	68.3	41.9	–26.4
Leather (basic material)	97.2	13.8	–83.4	65.2	9.3	–55.9	55.4	9.0	–46.4	59.5	8.4	–31.1
Leather processing industry	10.7	26.1	+15.4	13.5	28.2	+14.7	11.9	20.0	+8.1	12.0	17.7	+5.7
Shoe industry	14.8	24.7	+9.9	17.5	37.1	+19.6	22.0	30.9	+8.9	23.5	33.4	+9.9
Other	140.7	14.5	–126.2	172.8	15.2	–157.6	161.6	19.2	–142.4	184.9	16.1	–168.8
Total												
a) Together with rubber industry	1763.4	2020.0	+256.6	1750.5	2221.3	+470.8	1750.9	2071.3	+320.4	1682.8	1995.5	+321.7
b) Without rubber industry	1697.7	1977.1	+279.4	1665.6	2165.7	+500.1	1674.8	2028.7	+353.9	1614.5	1953.6	+339.1

Source: Own computations on the basis of data supplied by the Ministry of Foreign Trade and the Central Statistical Office

Export and import data by branches show a considerable stability, especially between 1980 and 1982. This fact alone indicates the role of non-rouble trade in the continuous running of Hungarian industry. In the branches examined restriction of non-rouble imports – very considerable at national economic level, amounting to about 20 percent between 1980 and 1982 if computed in dollars – was much less felt hardly exceeding 3 percent. On the other hand, however, the total non-rouble exports of the enterprise sphere examined decreased by 10 percent between 1980 and 1982 if also computed in dollars. On the basis of the sample it seems, therefore, that the Hungarian industry *did not contribute* in its totality to the realization of the economic policy

Table 2
Number of enterprises included in the sample by industries

	1979	1980	1981	1982
Textile industry	13	13	16	16
Clothing industry	8	8	12	12
Metallurgy	11	11	10	10
of which aluminium industry	1	1	1	1
Metal processing	3	3	4	5
Engineering industry	50	50	61	61
Oil and gas industry	15	15	15	15
Electric energy industry	1	1	1	1
Chemical industry	19	19	20	20
of which rubber industry	1	1	1	1
Leather (basic material) industry	3	3	3	3
Leather processing industry	3	3	3	3
Shoe industry	5	5	7	7
Other	4	4	6	7

endeavours aimed at improving the balance of foreign trade settled in convertible currency. This was, of course, attributable to the deteriorating performance of certain branches. For example, non-rouble imports of the chemical industry increased by 2 percent between 1980 and 1982, with a simultaneous decrease of exports by 3 percent. The 10 percent growth of non-rouble imports by the textile industry was accompanied by a 12 percent decrease of exports and in the shoe industry a 34 percent increase of non-rouble imports was accompanied by a 10 percent decrease of exports. Non-rouble exports of the engineering industry remained stagnant, while its imports increased by 3 percent. In metallurgy non-rouble imports decreased by 30 percent, while exports “only” by 28 percent. Among the industries examined there could be found none that increased its non-rouble exports between 1980 and 1982 with a simultaneous reduction of imports in the same relation.

During the four years examined industry had always been a net exporter in the

non-rouble trade. The extent of this surplus increased to almost double from 1979 to 1980, but in 1981 it considerably fell and continued to decrease also in 1982.

The overwhelming majority of net non-rouble exports of the industry came from three branches (metallurgy, engineering industry and, except for 1979, the oil and gas industry). However, while net non-rouble exports of the engineering industry as well as of the oil and gas industry did not considerably change between 1980 and 1982, those of metallurgy largely diminished and this was the main reason for the decrease of the net non-rouble exports of the entire industry, too. In the chemical industry (both with and without the rubber industry) the balance of direct turnover settled in convertible currency continuously deteriorated and by 1982 the previous net export of the chemical industry, considered as traditional, disappeared even without counting the rubber industry.

While in the vertical complex of iron and steel industry (metallurgy, metal processing, engineering industry) the individual production phases are net exporters even separately, in the two vertical complexes of the light industry the picture is by far not uniform. Clothing industry as well as the leather processing and shoe industries are traditionally net non-rouble exporters in themselves and in the public opinion these industries had previously an outstanding part in Hungary's exports of industrial articles to the West (in the coming about of this public opinion the emphasizing of reconstruction programmes of the light industry stressing their Western export orientation was likely to have an effect, too). However, Hungary cannot procure cotton in adequate quality and quantity, nor basic materials for the textile industry, hides, etc. either at home or from foreign trade channels settled in rouble. Therefore, a continuous considerable import of these raw materials from the convertible currency area is required. Figures indicating considerable net convertible imports by the textile industry and the leather (basic material) industry do reflect this. It should be seen, however, as well that a considerable part of non-rouble imports of these two industries are used one or two phases later for further processing in the clothing or leather processing or shoe industries, but there they already appear as inputs of domestic origin. Therefore, positions of the latter industries as net convertible exporters are partly maintained by considerable net non-rouble imports of industries supplying them.

In the cases of the clothing and shoe industries a conversion of raw materials imported against convertible currency into rouble exports does also take place (both industries have an important part in Hungary's exports of industrial articles to the CMEA, but first of all to the Soviet Union. This fact remains, however, partly hidden if intersectoral (input-output) relations are not taken into consideration. Namely, for a superficial observer it may easily seem that the Hungarian textile industry is forced to import considerable amounts from the West *because of domestic* needs, while the clothing industry oriented to CMEA-exports covers its raw material needs *mostly from domestic sources*. On the basis of the computation material available the extent of indirect conversion of convertible imports into CMEA-exports cannot be shown in the

two vertical complexes of the light industry, but this question would undoubtedly deserve further investigation.

The heading "Other industries" of the table indicates large net imports in the non-rouble trade, increasing over the entire period. This is practically a consequence of the traditionally considerable net imports of the paper and printing industries.

It had an important part in the considerable net Western export of metallurgy as well as the oil and gas industry that raw materials imported from the CMEA-market could be exported against dollar in a processed form. Though the currency-acquiring role of both branches cannot be disputed, it should not be forgotten that this form of conversion of CMEA-imports into Western exports has become a source of serious enterprise losses in recent years. There are even two reasons for that: firstly, because in the new price system – valid since the beginning of 1980 – Hungarian enterprises could obtain raw materials from CMEA-imports only at prices adjusted to world market ones, i.e. at higher prices, even if effective import prices were lower than world market ones, while the difference was taxed away by the budget. Secondly, because prices of metallurgical and oil products decreased on the world market after 1980. Therefore, though net Western imports of metallurgy as well as of the oil and gas industry were positive phenomena from the viewpoint of the external equilibrium of the national economy in the given structure, yet they imposed considerable burdens on the internal equilibrium. (That is why, e.g. domestic consumer prices of oil products had to be raised even several times, though the logic of the price system following world market prices would have justified precisely the contrary.) Owing to world market price trends as well as to the particularities of the Hungarian price system net Western exports of the manufacturing branches requiring relatively little raw material but more technical knowledge would have been more promising for the harmony between external and domestic equilibrium. It is not worth dealing with the problem here to what extent the well-known deficiencies in respect of technology and competitiveness speak against the above concept from the outset. Namely, the data of net turnover in the non-rouble trade indicate structural disadvantages in this case, too.

In the case of four sub-branches (pharmaceutical industry, telecommunication equipment and microelectronic industries, manufacturing of medical instruments, as well as of road vehicles) the supply with equipments and traditions of the Hungarian industry could provide a good basis for net convertible exports with considerable value added content. However, the pharmaceutical industry was a net non-rouble importer in all the four years examined (1979: -12.2 million, 1980: -33.4 million, 1981: -27.8 million, 1982: -39.5 million dollars). This seemingly peculiar fact conceals an enterprise and market organization structure already mentioned in connection with the light industry. The three representative big enterprises of the pharmaceutical industry are all considerable net non-rouble exporters which is not surprising. The yearly Western imports of the separate enterprise ensuring the supply of the industry with basic materials amount, however, to more than 100 million dollars (this import also covers, of course,

the needs of production for CMEA-exports and for the domestic market), thus the entire activity of the industry involves after all a regular non-rouble import surplus.

The telecommunication equipment and microelectronic industries represent most advanced technological levels by CMEA standards, similarly to the pharmaceutical industry. Development oriented to the CMEA-market has been promoted in this subbranch also by central development programmes of the last 15 years. Western exports also increased to some extent, but a proper spare parts (components) basis could only be brought about from non-rouble imports increasing faster than Western exports. Out of the four years examined only the first one, 1979 showed some Western export surplus (10.5 million dollars) in this sub-branch, while in all the three subsequent years already net non-rouble imports could be observed (1980: -10.7 million, 1981: -10.8 million dollars and 1982: -8.2 million dollars).

The manufacturing of medical instruments resulted in relatively considerable net non-rouble exports in all the four years (1979: 15.7 million, 1980: 23.0 million, 1981: 23.8 million, 1982: 28.1 million dollars). Sales directions, however, spoil to some extent the image eventually developed of a successful convertible export performance. In 1982, for example, 96.9 percent (13.7 million dollars) of the total non-rouble imports by the subbranch resulted from developed Western countries, while from non-rouble exports only 7.6 percent fell to developed Western countries (3.2 million dollars). The remaining part was exported mainly to countries paying in non-convertible currency (countries of Black-Africa, China). Therefore, the turnover of the sub-branch settled in convertible currency is very likely to result in a considerable import surplus every year.

Net non-rouble exports of road vehicles amounted to 39.6 million dollars in 1979, to 28.6 million in 1980, to 25.4 million in 1981 and to 34.6 million in 1982. These data reflect foreign trade relations of the entire vertical chain of production of the automobile industry and indicate a smooth, good export performance of the sub-branch during the period examined. However, the picture changes if we look at separate enterprise data. It turns out namely, that from the vertical complex established in the course of implementing the road vehicle programme it was practically only the bus assembly that provided the total amount of net non-rouble exports during the period examined, (net non-rouble exports of the enterprise in question amounted to 39.4 million dollars in 1979, to 52.2 million in 1980, to 31.8 million in 1981 and to 31.3 million in 1982). Therefore, inputs from Western imports were built into the final product (bus) first of all in the first phases of the production process also in the automobile industry just as in the pharmaceutical industry.

Structure of exports and net exports

The majority of net convertible exports of the Hungarian industry is contributed by a few branches, first of all by metallurgy, the oil and gas as well as the engineering industries. These branches have an important part also in the non-rouble exports of the

industry. There are, however, several such industries which though transacting considerable convertible exports, yet their net exports are not significant or even they are net non-rouble importers. Such are the textile and chemical industries because of which the structure of net non-rouble exports largely deviates from the commodity pattern of non-rouble exports of the entire Hungarian industry analyzed by several researchers [9, 10]. Also the character of this structure is different, since sectoral centres of gravity may be both "positive" and "negative", depending on whether net exports or imports of the given branch represent an outstanding share.

The two export structures show a strongly deviating picture. Sectoral centres of gravity of exports (metallurgy, engineering industry, oil- and gas industry) mostly coincide with "positive" sectoral centres of gravity of net exports. The only significant exception is the chemical industry where the share within net exports decreases parallel to an increasing share within exports. "Negative" sectoral centres of gravity of net exports are, however, those industries (textile industry, leather (basic material) industry as well as the paper industry absorbing the bulk of net imports of other industries) relying on considerable raw material imports, whose primary role is to transform raw materials imported from Western countries into semi-finished products or basic materials used in domestic manufacturing.

It is worth considering the columns of *Table 3* indicating net exports a little more thoroughly, namely, from the viewpoint how net convertible exports of the Hungarian

Table 3
Sectoral structure of non-rouble exports and net non-rouble exports of the Hungarian industry (in percentages)

	1979		1980		1981		1982	
	Exp.	Net. exp.	Exp.	Net. exp.	Exp.	Net. exp.	Exp.	Net exp.
Textile industry	6.8	-0.5	5.4	-5.3	5.6	-24.4	5.3	-16.0
Clothing industry	2.2	+84	2.1	+4.9	3.0	+10.3	2.7	+9.2
Metallurgy	27.3	+114.5	25.4	+60.6	22.2	+62.7	20.2	+65.6
Metal processing	1.0	+3.5	0.9	+2.3	1.1	+2.7	1.0	+0.8
Engineering industry	32.4	-75.9	32.8	+51.2	33.5	+63.4	36.4	+71.8
Oil, gas	8.6	-38.8	10.4	+21.4	9.6	+33.8	9.8	+33.5
Chemical industry*	17.6	+11.2	18.5	+3.1	20.6	+0.8	20.6	-2.8
Leather (basic material) industry	0.7	-29.8	0.4	-11.2	0.4	-13.1	0.4	-15.1
Leather processing industry	1.3	+5.5	1.3	+2.9	1.0	+2.3	0.9	+1.7
Shoe industry	1.2	+3.5	1.7	+3.9	1.1	+2.5	1.7	+2.9
Others	0.9	-47.4	1.1	-33.8	1.9	-40.0	1.0	-51.6
Altogether	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

*Without rubber industry

Source: *Table 1*

industry could be ensured by as few branches as possible "*ceteris paribus*", i.e. in a way that the net non-rouble turnover of other branches could be assumed as balanced, meaning that the net exports of a part of other branches could compensate for net imports of the other part. In this way branches of "strategic importance" for the net non-rouble exports of the Hungarian industry can be identified, without which Hungarian industry could not be a net non-rouble exporter even to the prevailing extent.

Out of positive shares to be found in columns of net exports as few as possible should add up to 100 meaning the entire net non-rouble exports of the industrial sample examined. In 1979 metallurgy alone transacted more net non-rouble exports than the entire industry, otherwise only the combined net exports of the engineering, chemical, clothing and leather processing industries attained those of the entire industry. In 1980 metallurgy and the engineering industry together achieved more net non-rouble exports than the entire industry altogether. In 1981, too, metallurgy and the engineering industry together, and, respectively, metallurgy, the oil and gas and the clothing industry, or, the engineering, the oil- and gas and the clothing industry combined transacted more net non-rouble exports than the entire industry altogether. And, in 1982 any two of metallurgy, the engineering as well as the oil- and gas industries together achieved more net non-rouble exports than the entire industry altogether or at least as much.

It may be seen, therefore, that beside the engineering industry between 1979 and 1982 more and more two basic material- and capital-intensive branches, metallurgy and the oil- and gas industry became major factors in the net non-rouble exports of the entire industry. The structure of net non-rouble exports was the most diversified in 1979, when it could be clearly stated yet that an increase of net exports could be imagined in two directions, based either on metallurgy or on several other industries manufacturing mainly end products. In the following years the realization possibility of the second alternative has gradually diminished and the structure of net exports, too, remained less and less diversified. Out of industries manufacturing end products only the engineering industry has remained a considerable net exporter.

Therefore, the structure of net non-rouble exports of the Hungarian industry has become such by the early 1980s in which basic material- and capital-intensive branches have a *key part*. In the 1960s and early 1970s it had been a serious argument in favour of their Western export oriented development that they processed basic materials coming from CMEA-imports into convertible export products to be sold favourably for hard currency. It is worth examining to what extent this argument holds at present, and which are the branches of heavy industry that can be considerable net non-rouble exporters because their supply with import materials is ensured primarily through the CMEA-trade.

In the *chemical industry* CMEA-imports amounted to 26.6 percent of total imports in 1979 and to 25.2 percent in 1982. It is especially striking that out of the 20 enterprises of the branch examined there were merely 2 in 1979 and 1 in 1982 whose CMEA-imports exceeded those from non-rouble countries. It is, therefore, quite unambiguous that they are much more relying on the world market in their imports than in their exports and this

branch can by no means be regarded as a field where a considerable conversion of CMEA-imports into exports earning convertible currency takes place.

In *metallurgy* CMEA-imports amounted to 64.0 percent of total imports in 1979 and to 67.0 percent in 1982. However, in iron and steel metallurgy this share was lower, 59.2 and 60.9 percent, while in aluminium metallurgy much higher, 77.6 and 84.5 percent. Therefore, CMEA-imports had no decisive part within the total imports of iron and steel metallurgy, either. What is more, their share did almost hardly change over the period examined. On the other hand, the share of CMEA-imports increased in the aluminium industry and this industry realizes its considerable Western exports indeed mainly by relying on basic materials of CMEA-origin.

In the *oil and gas industry* the share of CMEA increased within total imports from 70.9 to 92.6 percent between 1979 and 1982, while net non-rouble exports considerably increased, too. This was the only branch of heavy industry where we succeeded in changing over to the CMEA-market in imports and towards Western countries in exports in a significant part of the entire turnover. True, this took place precisely in a period when prices of CMEA (more precisely, Soviet) hydrocarbon imports steeply increased, while prices of exported oil products delivered to the West (first of all to Austria) decreased. Therefore, net non-rouble exports showing a more favourable picture could only be maintained by serious losses suffered in CMEA-relations.

The considerable net non-rouble exports of metallurgy — mainly aluminium metallurgy — as well as of the oil- and gas industry were, therefore, indeed based on the processing of imported materials of CMEA-origin. Terms of this conversion have, however, continuously worsened where (in the aluminium and oil industries) prices of raw material and primary energy imports steeply increased, while export prices did not at all follow this trend or only to a much lesser extent. Maintaining considerable net non-rouble exports in these two raw material — and capital-intensive branches is a source of more and more serious national economic losses. Thus, the fundamental short-term priority of Hungarian economic policy (preservation of solvency toward the West) and the basic objective for the longer run also recognized as one to be given priority (transformation of the industrial structure) seem, at the first sight, to be in a sharp contradiction difficult to resolve.

In the case of the third branch producing net non-rouble exports (engineering industry) the source of losses is found not in the conversion of imported materials into export products, but in the enterprise structure of net exports. Namely, there is a high degree of enterprise concentration in the net non-rouble exports of the engineering industry. Almost one third of total exports was realized by 1 enterprise, about 45 percent by 2 enterprises and more than 65 percent by altogether 4 enterprises, while 92.6 percent of the total net non-rouble exports of the entire engineering industry is given by 11 enterprises. Out of these 11 enterprises at least 5 have serious economic difficulties (with the leading vacuum technical enterprise the situation was especially grave in 1982–83). However, a too detailed analysis of this would lead too far. On the basis of other viewpoints the enterprise structure of net Western exports of the engineering industry does not prove to be fortunate, either.

A part of the 11 enterprises exports not only machinery. From their total non-rouble exports in 1982 (even apart from cable export) about 25 million dollars were made up of products other than machines, including semi-finished products and metal ware. Since the total non-rouble exports of these 11 enterprises amounted to 427 million dollars in 1982, non-machine export deliveries are important rather only from the viewpoint of their value.

It seems to be a much more important fact that the production structure of the 11 enterprises is rather one-sided. Some product groups representing the technological level and demands of earlier decades (vacuum technical products, railway vehicles, cables) have a large share in this structure. Their export cannot be abandoned by the Hungarian engineering industry at present, because it cannot be seen in what kind of other structure net convertible exports of a similar order of magnitude could be realized. Demand for the aforementioned export articles is decreasing all over the world, or at least hardly increases. Therefore, it is more and more difficult to fulfil export targets even in the existing structure. On the other hand, however, it is difficult to determine the direction of structural transformation, because such engineering products ought to be found which could result in considerable net export volumes in a very short time. There is no chance for that in the telecommunication and microelectronic industries, nor in the manufacturing of household machines, and even in the manufacturing of road vehicles, to be regarded as the most promising within the entire engineering industry, it may hardly be imagined that the value of net convertible exports would exceed 100 million dollars.

Therefore, the realization of net non-rouble exports expected from the engineering industry largely depends on the performance of a few enterprises. The question is whether this is characteristic only of the export of the engineering industry or it may be found more or less in the net non-rouble exports of the entire Hungarian industry, too.

First of all it is worth paying attention to the fact that it is a narrow sphere of Hungarian industrial enterprises that realizes considerable gross non-rouble exports from year to year. In 1982, for example, the non-rouble exports of 10 industrial enterprises exceeded 50 million dollars each. The biggest exporter was an oil industry enterprise with 131.3 million dollars, followed by a representative big enterprise of the aluminium industry (120.7 million dollars) and of the vacuum technical industry (114.4 million dollars), respectively. The other 7 enterprises exported between 81 and 51 million dollars (3 big enterprises of the chemical industry, 3 of metallurgy and 1 of the engineering industry).

Data of previous years indicate that *the sphere of enterprises realizing convertible exports is steady*. The first 10 places were taken — in a little varying order — by the same 10 enterprises both in 1981 and in 1980. In 1979 9 of them were on the list and only the enterprise placed 10th was a different one.

Out of the enterprises realizing the largest convertible imports the first 4 ones (in the paper, pharmaceutical, rubber industries and metallurgy) are only importing partly or not at all for their own purposes. The subsequent places, however, are taken in each year by enterprises transacting considerable Western exports and 6 of them can be regularly

found among the first 15 importers. Out of these 6 enterprises two are in the engineering industry, 2 in metallurgy, 1 in the oil- and gas industry and 1 in the chemical industry.

Among enterprises realizing the largest net non-rouble exports within the entire industry almost the same enterprises can be found from year to year, and this sphere remains almost as unchanged as with the biggest gross exporters. In the four years examined 7 enterprises took the first 5 places.

Out of these 7 enterprises 3 belonged to the iron- and steel metallurgy, 1 to non-ferrous metallurgy, 1 to engineering industry, 1 to the oil industry and 1 to the chemical industry. The biggest net exporters are, all but one, enterprises with high energy and raw material consumption, manufacturing mainly not end products.

It is worth now considering again how much of the net non-rouble exports of the Hungarian industry is "enterprise-dependent", i.e. the net non-rouble exports of how many of the biggest net exporter enterprises would have equalled the net non-rouble exports of the entire industry in the years examined.

Table 4

Combined net non-rouble exports of the first 3, 4 and 5 enterprises, respectively, in comparison with the total non-rouble exports of the industry (in percentage)

	1979	1980	1981	1982
First 3 enterprises	103.3	73.8	91.6	88.7
First 4 enterprises	127.8	90.0	114.2	106.9
First 5 enterprises	148.4	104.3	135.5	124.7

Source: own computations

The degree of "enterprise dependence" of net non-rouble exports of the Hungarian industry is undoubtedly very high. In 1979 the combined net non-rouble exports of the first 3 enterprises, in 1980 those of the first 5 and in 1981 those of the first 4 ones exceeded those of the entire industry altogether. Nor should it be neglected that usually they are always the same enterprises. The question is how the sectoral and enterprise structure of net non-rouble exports may be judged from the viewpoint of Hungarian economic policy and to what extent this structure furthers or impedes the development of a production and export structure better meeting world economic and domestic requirements than at present.

Net exports and domestic economic power relations

Net non-rouble exports express after all – though in a little inexperienced formulation – how much convertible currency the individual branches or enterprises earn for the national economy. This is all the more important since the government and economic policy emphasize first of all which the objectives are for which *no* convertible currency is available. Ever since countries and products of the West had reemerged from the almost forgotten past (i.e. since the late 1950s) the population has continuously been feeling this currency shortage, first of all not as tourists, but rather as consumers. In the course of the last 28 years economic policy proclaimed the need of saving Western imports several times as a campaign task [11], but the payment position of the country had never been so bad prior to 1978 that this saving would have become ingrained in the relationship between economic management and the enterprises, too. After 1978 a turn took place in this field, though – and this is a development not without interest – for the population the shortage of Western import articles as well as of foreign currency available for travelling abroad has not become any greater than it had been previously (though it is true that prices multiplied in both respects).

Since 1978 Hungarian enterprises have been feeling through a series of direct and indirect regulators that convertible currency has become a “bottleneck” much more than before. The majority of enterprises cannot do anything about this emergency situation, because they are practically unable to enforce their interests in this field against economic management (since a very cunning argumentation is needed on part of a smaller enterprise to make the maintenance of its activity dependent exclusively on the central licensing of a certain amount of Western import). There exists, however, another sphere of enterprises, much narrower in number, but with a large value of output and a great many employees, and they possess a relatively wide range of instruments to enforce their interests. Then, even *within this sphere of enterprises* also a third sphere may be found, whose members have already been referred to in the previous part of this study. These are the enterprises which are considerable net non-rouble exporters and without them the Hungarian national economy and industry could earn much less convertible currency than at present.

Otherwise, the great majority of these enterprises is highly vulnerable (with serious deficits* and/or largely dependent on raw material and energy imports of CMEA-origin, more and more feeling negative effects of the price gap, etc.). This vulnerability is very relative, however, if, owing to their considerable net non-rouble exports, the national economy strongly needs these enterprises. On such an occasion a situation may arise that is worth thoroughly considering even for two reasons:

1. Despite their continuous economic difficulties enterprises transacting considerable net non-rouble exports may obtain good chances to assert their interests against

*A study by János Deák [5] shows a strong correlation between the convertible exports of Hungarian producing enterprises and their domestic indebtedness.

economic management. The activity of all of them is determinant for the development of the annual balance of payments in convertible currency of the national economy. With a view to the short-term primary national economic objective, i.e. preservation of solvency in convertible currency they are at present the "best" enterprises of Hungarian industry. Economic control cannot risk any decision (either *individually*, concerning one of the above enterprises, or with *overall validity* affecting a wider sphere of enterprises) that would influence any of such enterprises in a way that they would be forced to reduce their net convertible exports. Namely, the measuring of economic activity applied in the present emergency situation places higher — within very wide limits — an enterprise achieving dollar exports or dollar savings through forint inputs, even though uneconomically, than another one that can earn forints through forint investment very economically (e.g. a firm undertaking fast and efficient mitigation of the domestic housing shortage).^{*} The problem is not that economic activity would become impossible for these latter enterprises, but that the — imagined — normative control of the economy or of the industry might "threaten" rather only these ones. For example, only such normativity may be realized in connection with enterprises running into losses or as regards the taxation of enterprise incomes, that gives certain enterprises — with considerable net dollar earnings — a "more equal" treatment than to others.

Should this happen, the input requirements arising in forints of losing enterprises transacting considerable net dollar exports will be partly covered by other enterprises. Forints obtained from sales receipts or paid in taxes will be "devalued" for enterprises transacting considerable net convertible exports, while they will be "revalued" for all other enterprises. It is justified to put the imagined change in the rate of exchange of the forint between quotation marks, because no real change takes place in the rate of exchange. Enterprises transacting considerable net convertible exports will merely feel — in an environment of seemingly consistent normative regulation — that they obtain more forints than they produced, while other enterprises will obtain less than they produced. Of course, it may be assumed that normativity would really be enforced equally against the latter, i.e. individual enterprises would participate in the support of large net exporters for example in proportion to their basis of tax assessment.

The above outlined situation should by no means be qualified as more unfavourable than the present one, since, even with a normativity *enforced only towards a part of the enterprise sphere*, the participation of the budget in financing losing enterprises could sooner or later considerably be decreased. Simply because in this supposed situation enterprises permanently making losses can only survive if they are important net non-rouble exporters. The number of such enterprises is and, of course, can only be small.

However, it is expedient to briefly deal with this imagined situation not in order to illustrate the necessarily incomplete scope of normativity. It is worth rather considering

^{*}Not to speak about enterprises capable of earning forints very economically by means of dollar investment.

that financial movements felt by the enterprises similarly to changes in exchange rate *would logically further strengthen the already existing situation*. The simple reason for this is that an enterprise experiencing devaluation becomes interested in boosting its exports (thus probably of net exports), while the others just conversely. A strange situation may arise where efforts aimed at ensuring the financial survival of enterprises transacting large convertible exports strengthen themselves, because net Western exports will more and more concentrate on the same sphere of enterprises. The process outlined in the foregoing is perhaps not very near to reality at present yet. The fact, however, that according to what was explained in the previous chapter the sphere of enterprises transacting considerable net Western exports would hardly change warns that there may still be some reality in this assumption.

Big net exporter enterprises may reckon with preferential treatment on the part of economic control agencies in many other respects, too, which may further strengthen their exceptional position. Namely, economic management may not risk that these enterprises achieve considerably less net Western exports than previously. On the other hand, however, this enterprise sphere includes partly enterprises in a *permanently deteriorating situation*, but their position as big net Western exporters promises exemptions for them almost all the time until the contemporary solvency problems of the Hungarian national economy will persist.

It is perhaps worth thinking over in view of what has been written in the foregoing whether there is not a danger that an export sector of almost enclave character emerges in the Hungarian industry sooner or later, in which enterprises will be (or perhaps even already are) included not on the basis of profitability, export efficiency and structural policy viewpoints, but on that of their net foreign exchange earnings.

2. Enterprises transacting considerable net convertible exports may become almost "untouchable" for structural policy. Their major part is working in such branches, however, whose partial suppression is made sooner or later urgent precisely by world economic pressures. It hardly needs any detailed explanation that lasting foreign exchange problems of the Hungarian national economy have a *structure-conserving effect* not only because of the scarcity of investment goods and productive import possibilities, but also because structural transformation could only take place at the expense of enterprises *producing considerable net foreign exchange earnings to a not insignificant extent*. This, however, would considerably aggravate these problems in the short run.

Finally, we would mention a more comprehensive economic strategy viewpoint, too. Namely, when the value order among enterprises largely depends also on the fact *which enterprise or branch imports less as compared to its exports*, then isolation from the world economy will become stronger, and the danger of growing backwardness in technology, quality and competitiveness will increase. Not only the fact of isolation itself is threatening, but also the spreading of views considering isolation as a logical consequence of foreign exchange problems (and as a condition of preventing their aggravation). Such views may largely influence also economic policy and may divert it to the path desired by supporters of such views after a certain time.

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ОТРАСЛЕВАЯ И ФАБРИЧНО-ЗАВОДСКАЯ СТРУКТУРА ЧИСТОГО ЭКСПОРТА ВЕНГЕРСКОЙ ПРОМЫШЛЕННОСТИ, ОПЛАЧИВАЕМОГО КОНВЕРТИРУЕМОЙ ВАЛЮТОЙ

А. ТЭРЭК

Поскольку с конца семидесятых годов ключевым вопросом развития венгерской экономики стало восстановление равновесия ее торгового и платежного баланса в конвертируемой валюте, экспортная выручка в конвертируемой валюте стала, пожалуй, основным показателем успеха хозяйственной деятельности. Автор предпринял анализ экспортной деятельности венгерской промышленности в переломные 1979—1982 годы на базе сведений по предприятиям, подведомственных Министерству промышленности. Эти сведения охватывают свыше 80 процентов экспорта промышленных изделий и почти 50 процентов совокупного венгерского экспорта, оплачиваемого в конвертируемой валюте. За основу анализа автор принял показатель чистой экспортной выручки в конвертируемой валюте, рассчитанный им по всем рассматриваемым отраслям и предприятиям как разница между валовой экспортной выручкой и затратами импорта, оплачиваемого в конвертируемой валюте.

Расчеты автора показывают, что если по всему народному хозяйству в целом импорт, оплачиваемый в конвертируемой валюте, был урезан в 1980—1982 гг. на 20 процентов, то в рассматриваемых отраслях это сокращение составило всего 3 процента. Однако, общая экспортная выручка крупной промышленности (в долларах) в то же время упала на 10 процентов. А это означает, что крупная промышленность в целом не внесла вклада в восстановление равновесия внешнеторгового баланса в конвертируемой валюте. Автор детально анализирует в статье положение с экспортоспособностью по отраслям и важнейшим предприятиям венгерской промышленности.

COMMENTS AND CRITICISM

ON NEW TRENDS IN INTERNATIONAL INDUSTRIAL DEVELOPMENT AND THE DIVISION OF LABOUR

A. KÖVES

In his latest book [1] Béla Kádár speaks about three inseparable, mutually interrelated dimensions of the Hungarian economic reform. According to him, the sources of the reform idea must be sought in the recognition of the historical lag of the country and of the necessity of catching up, efforts to reform the operational system of the socialist economy and – most recently – in the fact that adjustment to the world economic challenges of new type cannot be avoided.

Adjustment, or to use Béla Kádár's favourite term the "compulsion to adjust" poses an extremely difficult task to the Hungarian economy, yet it cannot be evaded, because "a dropping out of current world wide processes. . . might seal the destiny of some countries in the long run" [p. 108]. This is all the more so as in the most recent period "the ratio of intraregional division of labour has diminished" all over the world, "and the worldwide character of the foreign economic orientation of industry has strengthened. [p. 137]. The present economic difficulties of the CMEA countries mostly derive from the fact that, in spite of these trends, their economic policies have not really furthered an efficient joining of the worldwide division of labour. . . The unsatisfactory results of the central industrial development programs. . . of most of the small CMEA countries mainly reflect the exaggerated, in fact almost exclusive attachment to the demands of the domestic and regional markets. The absence of insufficiency of investment programs in keeping with the demands of world market competitiveness. . . increased the weight of those industries *which may be considered as structurally backward* (italics in the original – A. K.) on a world scale and in a disadvantageous position technologically and from the aspect of competitiveness. . . In the wake of these development trends the intra-regional division of labour mediates energies promoting the economic and technological catching up with the developed Western countries in an ever narrowing band." [pp. 230–231]

The "cumulated gravity" for Hungary of the world economic challenge may be illustrated by the 60–70 percent deterioration in the terms of trade in the long run (relative to the beginning of this century) which can be traced back ". . . to the mistaken development policy response to the deterioration in external conditions, to the consequences of the inward-looking, protectionist therapy in the interwar period and

then in the fifties" . . . that is, ". . . it is of a long-term, structural nature and indicates concern about the future viability of the country, as well as the necessity, brooking no delay, of comprehensive and continuous reforms." [p. 252]

How could an incorrect development policy response to the changes in the international environment be prevented in the future? Béla Kádár — as in his earlier works — endeavours to clarify the nature of possible answers and their consequences first of all by presenting the lasting processes taking place in world economy, and analysing their motive powers and impacts. He examines in detail the general trends in international industrial development, the sources of industrial growth, and within the latter, the changing role in growth of natural resources, labour and investment, as well as that of technology, together with the characteristic features of today's industrial policies in the major countries and groups of countries, the development of the international industrial division of labour and industrial cooperation among the principal regions of the world. The author of this review has participated, together with Béla Kádár, in several such projects and debates the aim of which was also to clarify the international environment of the Hungarian economy, and he is glad to state again, if not a "complete identity of views" as is usual in diplomatic communiqués, yet a high similarity in judgement of international trends, of the chances in Hungarian foreign trade and of the objectives of economic policy.

For example, I agree, without reservations, with Béla Kádár in the evaluation of natural resources. It is commonly known, that this problem has been stressed everywhere in the last 10–15 years when reasoning about the strategy of industrial development. In the quarter of a century following the Second World War disproportions in the development and profitability developed between the raw material extracting and manufacturing industries at the expense of the former, the untenability of which is illustrated not so much "by the, in some cases, apocalyptic visions of the Club of Rome", [p. 49], but by the double oil price explosion. In the new situation, as Kádár tellingly argues "instead of the *conquest* of nature" it is more and more 'peaceful coexistence' with nature that has to be stressed" (italics in the original — A. K.). This change also has economic reasons, but it is based in major part "on recognitions concerning the earlier overestimated ability of science to transform nature." (ibid.) *From this aspect* "the importance of 'managing' natural resources" is being revalued today and in the foreseeable future (ibid.), that is, partly the protection of the environment and of nature, partly (and "within much greater weight") "the saving of natural resources and their rational use" [p. 56]. Kádár emphasizes that this does not by a long shot mean a general revaluation of natural resources compared with others, or other commodities, as is brought out by trends in the relative prices of industrial articles and most kinds of raw materials. "In the case of the overwhelming majority of agricultural and mineral products *"acceptance. . . of a revaluation would be at least as grave a mistake in the theory or development strategy as was the dogma, fashionable in the fifties and sixties, advocating the structural terms-of-trade-disadvantages of the producers and exporters of primary products."* (italics in the original — A. K.) [p. 54.] Since 1973 it has only been the fuels that became

revalued significantly, but the probability of further oil price explosions is diminished by several factors — among them in the first place by the reduction in the energy-intensity of economic growth in the developed industrial countries, which are the world's greatest users of energy.

Expounding all that, Kádár convincingly argues against forecasts which — extrapolating the experience of the seventies, expect “the narrowest bottleneck of world economic growth to emerge” in the field of hydrocarbons. [p. 57] Ever since 1982, the international debt crisis has already taken over the role of the greatest threat menacing the world economy, and the easing of the crude oil market prompted the forecasters to put off the date of a likely new oil shortage and price explosion. Yet the warning by Béla Kádár is more than justified. The post-1973 economic policies of many countries — Hungary included — still lead to huge losses which, independent of efficiency viewpoints — more precisely, contrary to them — give priority in the allocation of resources to the development of raw material production and energetics for domestic consumption.

Kádár's argument is timely also from the aspect of foreign trade policy: it is understandable and right that countries depending on imports should wish to secure them well in advance from the relatively cheapest and most reliable sources. Obtaining imports at advantageous conditions can reasonably be regarded an important objective of economic policy in every country, whatever the kind of market and other situation. In addition, economic policy always has other important tasks as well, and it cannot be decided independent of space and time *what degree* of priority cheap and safe raw material procurement should enjoy in the long run, what sacrifice it is worth while making, that is, what tasks in the improvement of efficiency, in modernization or in the transformation of the economic mechanism should be relegated to the background or perhaps be sacrificed on the altar of safe procurement of materials. If it could be forecast with high probability that a shortage of oil will develop on the world market, oil prices will rise and procurement will run into difficulties, and that, owing to the particular features of the system of price formation within the CMEA, the difference between the price of oil originating from the CMEA market (the source now considered cheapest for Hungary) and that to be procured from the world market at higher prices will grow, then the effort to secure the largest possible part of raw materials necessary for the Hungarian economy from CMEA sources well in advance would have to enjoy high priority, much higher than if in the medium term a stagnation of world market oil prices or even their small decline seemed most likely, and it would cause no headache to procure oil on the world market. On the contrary, the problem might be how to resell oil one had to obtain since some oil producing countries cannot or are not willing to pay for their imports except in oil.

Today the latter situation is characteristic. In spite of uncertainty in making forecasts the most likely variant is that this situation will not change radically in the eighties. Nevertheless — perhaps as an after-effect of the shocking events of the seventies — the implicit assumption strongly affects planning and economic policy behaviour that in this decade the rising prices and shortage of primary energy (and raw materials) might

be the greatest danger threatening the country from without and that the priority task is to avert it.* Activity based on this assumption may push to the background the implementation of those urging tasks on which Hungary's holding its own in the world market, and thus its economic development, mainly depend.

Equally important is what Kádár has to say in connection with the latest trends in East-West trade and industrial cooperation. He argues that the interests and scope of movement of individual countries and groups of countries deviate today to such a degree, both East and West, that "this in itself challenges the practical value of statements, and identifications of problems, relying on an investigation of East-West trade in large aggregates" [p. 183]. Trade between the Soviet Union and the USA is characterized, e.g., by quite different problems than that of the Soviet Union with the West European countries or than that between the smaller CMEA countries and the West. The difficulties and failures in the coordination of Western commercial policies towards the CMEA countries may be traced back to these differences in interests and so can the particular features of the foreign trade policies of individual CMEA countries.

As against those who believe that the perspectives of East-West economic relations are limited for political reasons owing to the growing international tensions and who wish to keep trade within strict limits for such reasons, and even to restrict it, Kádár argues that East-West trade is mainly influenced by economic factors. He remarks on Western restrictive actions that "government decisions do not automatically imply their implementation, and the lack of harmony between the formulated strategic objectives and their implementation may be considerable if objective economic laws and interests are neglected to however limited a degree." [pp. 183–184]. This is how it happened that while the smaller CMEA countries were compelled to reduce their imports from the West in the early eighties because of their indebtedness, the imports of the Soviet Union alone increased, though the political restrictions were mainly aimed against it (and Poland). These restrictions did not extend to precisely that commodity which has a decisive weight in American-Soviet trade, and that is, grain.

The advocates of restrictions on trade cannot prevail in practice (and since the failure of President Carter's partial grain embargo they do not even put up a fight for restrictions) where considerable American economic interests are at stake. American policy was unable to deter the West-European countries, carrying on a much more intensive trade with the CMEA countries than the USA, from their intention to engage in such trade. From this the important conclusion may therefore be drawn that international tension can make a negative impact on East-West trade where adequate Western *economic* interests are absent.

*As was explained in detail elsewhere [2, 3], in connection with judging the *degree* of priority of raw material procurement from within the CMEA other questions – relating to the character of cooperation within the CMEA, its mechanism and structure – emerge, and these are much more important than the trend of world market prices. But the assessment of and approach to the problems related to procuring raw materials from the CMEA market also discussed in Béla Kádár's book [pp. 232 and 235] concerning exogeneous limitations on imports and more difficult conditions of importing, may widely differ depending on the world market situation.

The expedient method of fighting these political dangers and risks is precisely the creation of interests that demand an intensification of relations and the exploration of new forms and new areas for these relations and *not* the reduction of contacts, of imports, or their "rationalization", which cannot lead to the elimination of dependence on Western imports if only because of the non-competitive, making up for shortages nature of the Western imports of CMEA countries; or else this takes place at unacceptably high prices. From this aspect the forced import-restricting policies of the CMEA countries and the deterioration of the East-European economic climate since the end of the last decade are particularly disadvantageous, in consequence of which the process whereby the area — and thus Hungary — is losing ground in the world economy may accelerate precisely at a time when calling a halt to it appears indispensable for domestic economic stabilization, and social progress.

I do not wish to add any more to those of Kádár's arguments and conclusions, with which I agree. Instead, let me briefly touch on two problems where we differ on matters of substance: the relationship between the market and planning, and the sectoral implications of economic and industrial policies.

According to Béla Kádár, adjustment to the world economy "makes it unavoidable also within the Hungarian system of economic control and management. . . that market mechanisms and various forms of central interference should coexist in the future as well." [p. 262]. He sharply argues against those who "identify the process of socio-economic progress with the absence of the state power from the economy, with allowing the market to act as the sole guide of value." [p. 40] This argument seems to be overdimensioned while circumventing the substance of the problem. As far as I know, the overwhelming majority of Hungarian economists do not challenge the view that the economic mechanism must be based "on a combination of central control and market mechanisms" [p. 263]. This is particularly true of those economists who advocate the reform of presently prevailing mechanisms, and urge the institutionalization of market regulation.

Let me quote from a recent paper by two authors known for their commitment to the reform: "... 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." [4] But our economic situation testifies to the fact that the mix that has prevailed in Hungary in the last decade is not advantageous, it has to be changed and the elements of market self-control have to be strengthened. If, in general, Kádár's argument holds that "under conditions of underdeveloped commodity production and division of labour market mechanisms can give but poor signals for decisions related to future expediency and profitability" [p. 262] the history of socialist economic control up to now testifies to the fact that if the market mechanisms do not sufficiently prevail in the enterprise sphere, if the operation of the firms is not so much determined by the need to hold their own in a competitive climate, but rather by bargaining about the plan and the regulators with the supervisory organs, then central control is even less capable of making and implementing decisions that further a joining into the

international division of labour that serves long-term efficiency. We know full well that economic control that does not rely on the market relations of enterprises, or does so to a limited degree has proved to be the least effective precisely as regards technical progress and structural transformation, that is, in the fields which – according to Béla Kádár – must not be left to “business improvisation” or to “the weighing of actual input and return ratios”, particularly if, in the spirit of Kádár’s writings, the success of structural transformation is measured by the ability to adjust to the world market.

In connection with the argument that “economic actors, enterprises and individuals, who have grown up in an environment of economic models operated by central plan instructions. . . can hardly be expected to exhibit rational behaviour, in conformity with the market, if market effects present themselves suddenly and in full scope in the economy. . .” [p. 262], one should not only note that, in the light of experience, anxiety because of the “sudden and full-scope” presence of market relations seems to be little justified. It also has to be mentioned that the central control agencies are equally such actors of the economic system of plan instructions as are enterprises and individuals, and they can free themselves from the way of reasoning, the logic of action of the system with the same difficulty as the latter. As experience shows, if they are not forced by changes in the system of management, they can equally be little expected to work out a long-term strategy of adjustment to a competitive world market environment and to assert them against reluctant and unsuitable enterprises.

Where I therefore agree with Béla Kádár is where he speaks about the necessity of changing the nature and substance of central control. “The functions of an industrial policy in a strategic sense have to shift from direct control towards carrying out the ownership role, guiding the economic environment, towards tasks serving technical progress, the safety of the economy and the development of activities or new enterprises serving the internal structural integration of the economy, as well as towards such as will promote the improvement of the infrastructure, protection of the environment, information of the economic units, their decisions, demand for labour, and the protection of their foreign trade and foreign policy interests.” [p. 264]

My comments on what Kádár writes – in a similarly polemic approach – about the necessity of sectoral industrial policies and about the views refuting such policies are similar: “In the course of the debates about improving the system of economic control and management one meets those who, on the basis of past experience, identify sectoral policies, the formulation of points of emphasis in industrial development and specialization on strategic level, *ab ovo* with smuggling back the directive control system, restricting the objective laws of the economy.” [p. 110] I, of course, agree with him in that sectoral policies are necessary. As part of a general plan, Hungarian economic and industrial policies also have to determine, beside many other things, what targets have to be pursued in the various sectors – be it ferrous metallurgy, the textile industry, the production of computers or whatever – development (or suppression); what instruments should be used for the purpose etc. All that has to be embodied in concrete programs. I believe that, formulated in such general terms, few in Hungary would object to that view.

Perhaps Kádár's way of putting things will give rise to more discussion, since "the formulation of points of emphasis in industrial development and specialization on strategic level" is not quite the same — but also more and also less — than sectoral policies relating separately to *every* industry and providing answers not necessarily and not in the first place to the question of preference or non-preference. Putting aside fine distinctions in formulation, it is very much the experience of the recent past, and even of the present, that there is much trouble with the strategic formulation of points of emphasis. As we also know from the author, the selected priority development programs frequently provide little support to adjustment to the world economy, and contribute to foreign economic tensions rather than help eliminate them, while the burdens of boosting exports to the West are carried by other — sometimes dispreferred — sectors.

Of course, Béla Kádár advocates quite different programs which are indeed export-oriented and which further adjustment. But what does or can make such a program different from the previous ones? The answer suggested by the book, namely, that things depend on the adequate information, knowledge, recognition of the situation, intentions, and ability to decide and implement of the central control agencies, is not reassuring in the light of experience. There is little opportunity for working out a successful sectoral policy, and its armory of instruments, without a system of economic control which amalgamates central control with market relations in a manner different from the present one and which assigns a greater role to the mechanisms of competition and where — conversely — the market position of enterprises, their performance, and world market competitiveness may serve as a foundation for working out sectoral policy, and may become the highest criterion of their success and failure. It is, however, likewise an empirical fact that a high price must be paid for a possible wrong sectoral policy, for mistaken sectoral decisions. Probably, this is the explanation for the scepticism in connection with sectoral policy objected to by Béla Kádár.

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REVIEWS

THE DEVELOPMENT OF LIVING STANDARDS IN HUNGARY FROM 1975 TO 1983

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By the mid-1970s the foreign economic equilibrium of Hungary had become upset: in 1973 the balance of trade closed yet with a surplus of Ft 16.4 thousand million, while in 1974 it already showed a deficit of Ft 38.5 thousand million.

Under such circumstances the 5th five-year plan (1976–1980) set the aim to restore the national economic and foreign trade equilibrium, which the government wished to achieve in the short or medium term through raising domestic consumption at a slower rate than national income, and through increasing exports faster than imports. According to the envisaged living standards, real income was to increase by 18–20 percent, and total personal consumption by 21–30 percent. During the implementation of the plan this conception underwent a considerable change, to which we shall revert in a subsequent part of the present paper.

The 6th five-year plan, (1981–1985) was conceived in the same spirit, while stipulating even harder conditions. It still gives priority to “resorting and strengthening the equilibrium of the national economy, and within it that of foreign trade. This is to be achieved by means of improving the efficiency of social production, promoting its export-oriented development, and by domestic consumption increasing at a considerably slower rate than national income.” [1] As for the living standards, this plan conception concentrated on a few important tasks: that wages should increase in adjustment to labour efficiency and the 1980 level of real wages should be preserved on average; that the real value of low pensions and social benefits be preserved; public health and the general school network be developed; the living conditions of those in a disadvantageous position from several aspects be improved; and a high standard of commodity supply and services ought to be guaranteed.

In the following we shall provide an overview of the development of living standards in the light of the living standards policy conceptions outlined in the foregoing, and an attempt will be made at demonstrating the weight of burdens the Hungarian population carries in restoring the economic equilibrium.

Consumer prices, real wages, real income

In centrally planned economies the most efficient tool available to living standards policy to control consumption is the official changing of consumer prices. (Today a change means almost exclusively the raising of prices.)

The general consumer price index rose in Hungary by 63 percent between 1975 and 1983, at a yearly rate of 6.3 percent. Within this period, it was from 1979 on that a real acceleration of price increases took place. The cause underlying this is that the improvement in efficiency expected by the economic leadership according to the 5th five year plan target did not materialize. Attempts at stopping the deterioration of the balance of trade failed: the import surplus peaked in 1978 with Ft 60 thousand million at current prices. In 1979–1980 essential changes were brought about in the regulatory system and in the price system. The overall consumer price increase of 1979 was aimed, beside diminishing disproportions between prices and costs, at a radical curbing of the growth of consumption. As a result, per capita real income increased by 9.2 percent instead of the planned 18–20 percent between 1975 and 1980, while consumption grew by 12.8 percent instead of the planned 21–30 percent. That is, in comparison with the average of the preceding ten years, the growth rate of real income fell to its third, and that of consumption to somewhat more than half.

The frequently used key expression of the 5th five-year plan conception: "preservation of the living standards" is an euphemism to replace the statement: "living standards cannot rise". As a programme for a five-year period, it is, of course, the standards of the base year – in our case 1980 – that the plan suggests to "preserve". In fact, however, the rising of living standards stopped already during the former plan period, as it was felt in several of its components. (See *Tables 1 and 2.*) In 1980 real wages were only 3.6 percent higher than in 1975, and labour incomes were 2.4 percent

Table 1
Per capita real wages of workers and other employees
previous year = 100

Year	Net nominal average earnings	Consumer price index	Real wages
1976	105.1	105.0	100.1
1977	107.8	103.9	103.8
1978	107.8	104.6	103.1
1979	107.0	108.9	98.3
1980	107.4	109.2	98.4
1981	105.8	104.6	101.1
1982	106.1	106.8	99.3
1983	104.1	107.4	96.9

Source: Statistical Yearbook 1982 and
Hungarian Statistical Pocketbook 1983

Table 2
Per capita real income
 previous year = 100

Year	Real income total	Of which		
		labour income	social benefits in money	in kind
1976	100.8	99.0	108.0	104.5
1977	104.9	105.1	106.0	104.3
1978	102.9	102.4	102.7	105.8
1979	100.1	97.7	107.4	103.1
1980	100.4	98.4	105.7	104.3
1981	102.9	102.0	103.3	103.8
1982	100.3	99.3	102.2	102.6
1983	100.9	99.8	101.6	101.8

Source: Statistical Yearbook 1981 and
 Hungarian Statistical Pocketbook 1983

higher. The rise of real income was stagnating in 1979–1980. In 1980, incomes earned in agriculture were more than 3 percent lower even than in 1975.

After the about 3 percent real income growth of 1981, in 1982 the consumer price index rose by 6.9 percent upon central intervention, instead of the 4.8–5.2 percent planned. This price increase was to save the delicate balance of payments, to keep domestic consumption within the planned limits, and, by reducing the price subsidies granted in several groups of products, to increase budget revenues. These aims were achieved: the solvency of the country was preserved, per capita real income stayed at the level of the preceding year, and consumption grew by 1 percent.

The stagnating per capita national average of real income covers, however, a rather wide dispersion by households. In quite a large part of the families real income has fallen, while at the other end a considerable increase of real income is found.

As opposed to the reduction of *labour incomes* within real income in 1979–1980 and 1982 and to their 2 percent increase in 1981, the growth of *social incomes (benefits) in money and kind* exceeding that of real income furthered the reduction of the share of labour incomes within real income, even though the increase of social benefits, both in money and in kind, slowed down considerably. Yet the rise of social benefits in money comes basically, i.e. up to 75 percent, from the rising amount of the pensions paid out. The increase of the sum of pensions paid out is a natural process: it is a consequence of the still rising number of pensioners, the higher average pension of the newly retired, the gradually decreasing rate of those receiving low pensions, and the automatic yearly 2 percent, but at least Ft 100, increase of all pensions. The growing pensions notwithstanding, the real income of a constantly growing number of retired people has been falling because of the accelerated price increases of recent years. The compensation granted after

the 9.8 percent price increase of 1979 could only make up for 9.1 percent in the case of the average pension. With pensions under (monthly) Ft 5000 the automatic rise introduced in 1981 was an increase of more than 2 percent, but only with the pensions under Ft 2170 — that is, those lower even than the average pension of Ft 2336 — could it compensate for a price rise of 4.6 percent (the rise of the consumer price level in that year). In 1982 the price rise of 6.9 percent — as opposed to the planned 4.8–5.2 percent — could be compensated by the automatism of Ft 100 only with pensions under Ft 1450. On the occasion of the 1983 price increases, however, the pensioners receiving less than a monthly Ft 2500 received Ft 170 compensation in addition to the Ft 100 automatic rise at the beginning of the year.

I think that the blighted prospects of the pensioners are one of the most worrying problems of Hungarian society, even though the now two million pensioners do not constitute a homogeneous group. More than half of them, however, receive a monthly pension of under Ft 2500. This means that the poverty question coincides largely with the old age problem.

Beside pensions, the real value and relative value of other social benefits (family allowance, child care allowance, scholarships, etc.) are not guaranteed, either. The reduced real value of the family allowance further strengthens the role of the wage-earner to dependant ratio already dominating in the per head family incomes. The 1983 July raising of the family allowance acted to a certain extent as a counterbalancing measure. At the same time, family allowance was extended to families with one child, up to six years of age.

The development of social benefits in kind is basically influenced by the unsatisfactory development of the non-material sectors. Public health, education and culture could not keep pace with the suddenly grown demands of the vastly increased number of rightful claimants. The development of these sectors lagged far behind even that of the material sectors. This process became more intensive in the last years of the 5th five-year plan and, according to the estimates of the 6th five-year plan, the situation is further deteriorating. Of the strongly reduced investments of 1980–1981 those allotted to non-material sectors fell in 1980 yet at a smaller rate than those in the material sectors, but in 1981 they fell already at a higher rate. In 1982 and 1983 investments in the non-material sectors fell by a further 2–3 percentage points.

Utilization of the money income of households

On examining the money resources available to households from the utilization side, three important areas are to be distinguished: consumption, home building and money saving. The development of these and their changing proportions are reflected in *Table 3*.

Knowing the price policy measures, it may be established that the share of purchased consumption and savings was changing considerably at each other's expense

Table 3
Utilization of the money incomes of households
 (percentage distribution on the basis of current price data)

	1975	1978	1979	1980	1981	1982	1983
Money income	96.9	96.5	96.1	94.6	94.8	94.7	93.5
Surplus of credits raised and repaid	3.1	3.5	3.9	5.4	5.2	5.3	6.5
Disposable income	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Utilization:							
Purchased consumption	87.3	86.6	89.1	88.5	88.3	88.5	86.8
of which: durable consumer goods	8.6	8.5	8.9	8.5	8.5	8.0	7.6
Housing investment	6.7	6.2	6.2	7.3	6.4	6.8	7.1
Money savings	6.0	7.2	4.7	4.2	5.3	4.7	6.1

Source: A lakosság jövedelme és fogyasztása 1960–1978 (Household incomes and consumption 1960–1978.) Központi Statisztikai Hivatal (Central Statistical Office), 1980.

A lakosság jövedelme és fogyasztása 1980–1982 (Household incomes and consumption 1980–1982). Központi Statisztikai Hivatal (Central Statistical Office), 1984.
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under the effect of the consumer price changes. With the 9 percent rise in prices and stagnating real incomes of 1979, the share of consumption grew by approximately 2.5 percentage points, while saving propensity fell. By 1983, however, with a nearly 8 percent rise in the price level and stagnating real incomes, the share of consumption decreased, while that of housing investments and money savings was growing.

In the spending of incomes the level of commodity supply represents a motivation factor. In Hungary there is a persistent shortage of building materials and of certain consumer durables. Although food supply is satisfactory on the whole, there is a relatively insufficient range of choice of cheap foodstuffs. This has a particularly unfavourable impact on the low-income groups of the population since, after the price increase of a certain food item, the substitution effect can assert itself but to a limited extent. Unsatisfied solvent demand also led to forced savings in some years.

Consumption trends and changes in the consumption pattern

The tendency of household consumption had shown a growth rate of real incomes exceeding that of consumption up to 1977. Between the years 1978 and 1983, however, the growth rate of consumption surpassed that of real incomes each year, and between 1976 and 1983 surpassed it also in the average of seven years. (To the greatest extent in

1979: by 2.3 percentage points, with real incomes stagnating.) It has already been mentioned that this showed in the fall of the yearly growth rate of the stock of household savings: while, for example, in 1978 the stock grew by Ft 17.4 thousand million, in 1980 the growth was only Ft 9.5 thousand million. That is to say, people reduced their yearly savings to finance their additional consumption, since they had no additional income in 1979–1980. In 1981 the growth rate of real income exceeding the planned figure (2.2 percent) allowed a higher level not only of consumption but also of savings than that in the previous year. In 1982 and 1983, however, real wages, real incomes and consumption could be kept within the planned limits only by means of central price measures.

In the years from 1976 to 1983 a determinant role was played in the development of consumption and within it of the different expenditure categories by the about 63 percent rise (6.3 percent on a yearly average) of the consumer price level, and by the only 1.5 percent yearly average growth of real incomes. The unusual situation has been created in Hungarian demand analysis that it would be possible almost purely to examine the effects of changes in the price level and in relative prices exerted on demand. Things are, however, not that simple, since households respond sensitively to changes in relative prices only if real incomes are perceptibly growing and commodity supply permits the mutual substitution of commodities.

In *Table 4* the consumer price index and the relative price index of the different major expenditure categories are shown in the period from 1975 to 1983, and, for a better understanding, the extent and tendency of the relative changes in prices is charted. The relative price index is the quotient of the price index of the expenditure category under scrutiny and of that of total consumption.

During the whole period, it was the price level of foodstuffs of all the expenditure categories that rose the highest, by 71 percent. The lower than average growth of the consumer prices of durable consumer goods, heating, household energy, clothing articles and services put these expenditure categories in a comparatively favourable position: their relative prices decreased.

In the course of the 1982 price increases the prices of beverages and tobacco, heating, household energy and services grew faster than the average, therefore, their relative prices grew, while those of the other expenditure categories lowered. The price rise accelerating from 1979 continued in 1983: the price level rose by nearly 8 percent.

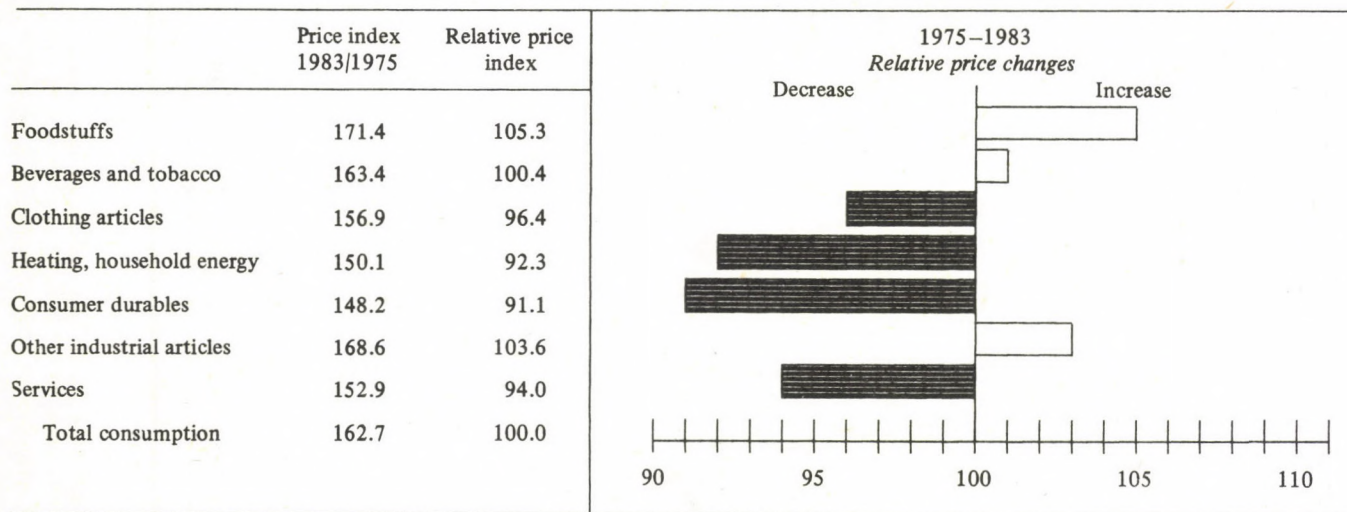
The acceleration of price movements is well reflected by the fact that while between 1960 and 1978 the consumer price index grew by 38.6 percent, between 1978 and 1983 it rose by 43 percent.

Concerning the undesirable effect of the 1982 price changes it has to be pointed out that it is exactly the lowest income brackets whose price index is the highest in respect of total consumption, beverages and tobacco, clothing, heating, household energy and consumer durables.

Let us see what consumption data show for the period 1976 to 1983.

The rise in the relative prices of foodstuffs palpably influenced food consumption,

Table 4
Changes in consumer prices and relative prices



Source: Hungarian Statistical Pocketbook 1983.

and had a particularly unfavourable effect on the low income groups, in the spendings of which it is exactly foodstuffs that represent the highest share. It may be seen in *Table 5* that food consumption hardly grew in volume from 1978, while spendings on consumer durables, heating, household energy and services were rising at a rate by far exceeding that of total consumption.

Table 5
Development of per capita consumption
(at comparative prices, previous year = 100)

	1976	1978	1979	1980	1981	1982	1983
Foodstuffs	98.0	101.6	100.0	99.1	101.3	100.9	100.8
Beverages and tobacco	108.3	101.3	99.2	104.9	100.6	101.5	99.0
Clothing articles	94.1	101.3	99.6	100.1	102.6	97.3	101.1
Heating, household energy	112.3	107.3	107.0	104.2	103.0	103.6	98.4
Consumer durables	98.2	107.7	106.5	93.3	107.3	99.1	94.5
Other industrial articles	93.4	104.7	105.8	100.2	104.8	102.1	100.2
Services	104.3	105.0	104.8	103.9	104.0	103.1	102.3
Consumption total	101.3	103.3	102.3	101.0	102.6	101.3	100.5

Source: Statistical Yearbook 1981

A lakosság jövedelme és fogyasztása (Household incomes and consumption), Központi Statisztikai Hivatal (Central Statistical Office), 1984

Within foodstuffs, the consumption of meat and animal protein was stagnating, that of fats and, in general, of calories growing, and that of potato falling. The marked growth of milk and milk products consumption is a favourable phenomenon.

As for clothing expenditure, the statement still holds by and large that it plays a so-called buffer role, which is to say that with real incomes slowly rising or stagnating and prices fast rising, people spend much less on clothing.

It was the combined effect of several factors that expenditures on heating and household energy grew. Among these factors let us mention the installation of energy consuming equipments in new homes (lighting, heating, a wide range of electric appliances, etc.), the modernization of old homes, and their fitting out with new household machines, the increasing average floor space and number of rooms of homes, the constantly growing energy consumption in villages (as a result of the spreading of container gas), and the increasing ratio of houses with district heating.

This process is reflected and confirmed by the faster than average growth of expenditures on consumer durables and other industrial products in certain years, though purchases fell considerably between 1980 and 1983; by 7 and 6 percent, respectively.

Expenditure on services was growing much more smoothly and faster than in other categories of expenditure.

As a consequence of the different growth rates of each category of expenditure, the pattern of consumer expenditure also underwent changes. (See *Table 6*.) Some of the

Table 6
Changes in the consumption pattern between 1975 and 1983

	Foodstuffs	Beverages and tobacco	Clothing	Heating, household energy	Consumer durables	Other industrial articles	Services
1975	32.5	14.5	10.6	2.9	7.4	10.4	21.7
1979	29.5	15.2	9.2	3.4	8.0	11.4	23.2
1980	29.0	15.8	9.0	4.2	8.1	11.2	24.0
1981	28.6	15.5	9.0	4.2	8.5	11.4	24.3
1982	28.5	15.5	8.6	4.3	8.3	11.5	24.8
1983	28.6	15.3	8.7	4.2	7.8	11.5	25.2

Source: Hungarian Statistical Pocketbook 1979, 1983.

tendencies showing earlier in the consumption pattern accelerated from 1979, other ones slowed down.

The ratio of *foodstuffs* decreased between 1979 and 1981 at a slower rate than in the average of the preceding 5 or 10 years, and in 1982–1983 it stayed at the 1981 level.

The ratio of *beverages and tobacco* – conspicuously high from the aspect of both consumption policy and social policy – did not much decrease in spite of several considerable price increases.

The falling tendency of the share of *clothing* continued.

As a consequence of the high rise in prices and of stagnating real incomes, the growth in the share of *consumer durables* stopped: from 1981 on a gradual decrease has been observed. This is in contrast with international experience, with changes taking place in the consumption pattern of developed countries, as well as with the tendencies earlier observed in Hungary, too.

A marked change took place in *services* from the second half of the 1970s. While between 1960 and 1975 the ratio of services rose from 20 to only 21.7 percent, i.e. it was stagnating for years as against the international tendency, by 1983 this ratio had risen to 25.2 percent.

This fact is explained by the fact that services represent the expenditure category with the smoothest rate of development. As compared to the yearly 4.5 percent growth rate of the period between 1961 and 1980, that of the years from 1981 to 1983 fell to 3.1 percent. At the same time, the figures of total consumption for the same periods are 3.7 and 1.5 percent, respectively.

It is easy to see that in the long period, between 1961 and 1980, the difference between the growth rates of services and of total consumption only amounts to 0.8 percentage points on average, while in the years 1981 to 1983 this difference is already 1.6 percentage points. This apparently means that in the latter period the ratio of services

was rising at a higher rate, while what happened in fact only was that the growth of total consumption slowed down much more than that of services.

Also growing ratios are found in the case of heating and household energy. It should be noted, however, that in the case of these expenditures and partly also of those on services, it is not primarily the effect of real income, but other important factors that assert themselves. These factors — already mentioned — affecting the structural transformation of consumption exert their influence automatically in the course of the socio-economic structural transformation, practically independent of the real income.

However, the decelerating growth or stagnation of real income, and the rising price level turned or stopped — in respect of consumer durables and partly also foodstuffs — the tendencies which had developed earlier and had been in conformity with the international ones.

Some problems of infrastructural supply

In people's judgement of consumption and of living standards in a wider sense it is highly important — beside the quantity and quality standards of commodity supply — how people feel about the standards of infrastructural supply: housing, public health, education, telephone network, standards of the commercial and industrial service network, etc. In a disadvantageous income position, people accept a slower growth or perhaps even a decrease of commodity consumption with more understanding than the reverse process, if at the same time they find a palpable improvement in infrastructure. If, for example, with the prevailing income conditions someone gets an apartment, it would bring an outstanding quantitative and qualitative improvement into his living standards, even though it is well conceivable that his individual consumption were to go down. In Hungary a considerable section of society still waits for a solution of their acute housing problem.

It is, therefore, to be highly appreciated that the government continues to give priority to the housing question, i.e. to the quantitative as well as qualitative improvement of the housing situation. The second 15-year home building programme envisaged, with the average floor space of homes to be gradually increased, the completion of 1.2 million new homes, and the renovation of 3–400 thousand old ones, since the necessity was recognized that the housing problem had to be solved not only by building new homes, but also through the renovation and modernization of existing buildings. Meanwhile, it is increasingly emphasized that people themselves must contribute to an increasing extent to solving their housing problems. This tendency has accelerated in recent years. In 1979 61 percent of all homes built were financed from private resources and 39 percent from the budget. In 1981 this ratio was 70 to 30, and in 1983 78 to 22, while the number of homes built from state resources fell by about 30 percent, and that of homes built from private resources by 6–7 percent. From 1982 on the credit terms of private home building improved considerably, social grants were

extended to those building family homes, whereas the disadvantageous feature of credit granting remained that the government does not subsidize families, but certain forms of home building. Besides, though credit terms may have become more favourable, in the full price of homes the ratio of credits is at the most unchanged because of the rapid increase in housing prices during the last ten years in respect of the purchase price per square metre, building costs, and land prices.

In the years from 1975 to 1980 approximately 453 thousand homes were built, of which, however, only a half represents a growth in stock because of the large number of demolitions, at a growing rate according to computations. Figures of the 6th five-year plan show that 370–390 thousand homes are to be built in the years 1981 to 1985, that is, 60–80 thousand less than in the preceding five-year period. Housing shortage is particularly bad in Budapest and in the big cities, and young people just starting a career and founding a family are in the worst situation.

On examination of the economic development of the country, it is no exaggeration to say that the serious lag of the infrastructural sector behind the general economic development standards of the country is in a large part responsible for the present critical situation, and it will continue to be the determinant of major processes, and an obstacle to development.

One of the most conspicuous features of the infrastructural lag is the *insufficiency and inadequacy of the telephone network*. If the number of telephones installed in homes is compared with home building, the lag is even increasing. The serious lag in the supply of telephones is a social disadvantage not only as regards a form of connexion between people, but it is also a serious obstacle to any extensive use of computer technical equipments.

It cannot be emphasized enough, how much, in a long perspective, the investments missed in the non-material branches of infrastructure — such as public health, education, culture, etc. — hold back economic growth and an up-to-date transformation of the economic structure.

* * *

Starting from the fact that in the given economic situation restoration of the balance of trade forces strict conditions upon the Hungarian economy, it has to be accepted that it is necessary, simultaneously with curbing the domestic consumption of national income, also to hold back household consumption. Such economic policy is acceptable, however, only in the short run. And it can produce a result only if the functional conditions of economy radically improve in the meantime, and also the conditions of a future growth and improvement in economy and living standards are laid down.

The measures taken with a view to the actual economic policy objective: improvement of the balance of trade, that is, the so-called restrictive policy is effective in several respects. The processes to be held back through central control — the

households' real income and consumption, the centrally worked out regulatory system of wages, enterprise investment activity under stricter conditions — can be driven toward the desired channels by means of central measures. The deficit of the balance of trade can be spectacularly reduced in a short term by curbing household consumption and restricting imports. Such reserves and resources are, however, exhausted faster than the processes can emerge which would lead to an up-to-date structural transformation and to improved competitiveness of the economy. There is a persistently increasing lag in the improvement of efficiency and productivity.

Of the diversified connexions between economic activity and incomes, the effect of incomes on the development of economy and on incentives, cannot be stressed enough. A persistent stagnation of real wages and real income — for large masses of people, their decline — does not let the stimulating effect of earnings assert itself. These fundamental effects are not really counterbalanced by the effort at differentiating the nominal incomes, what is more, even such efforts are much constrained.

The curbing of incomes and consumption amounts in the long run to the restriction of economic growth and development.

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ENTERPRISE INCOMES IN HUNGARY, THEIR GENERATION, DISTRIBUTION AND DIFFERENTIATION

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The degree of income differentials forming in the course of business, i.e., how much, and depending on what the incomes of the individual business units get differentiated, has been one of the generally intriguing questions in Hungary for the last years. Growing income differentials necessarily accompany the improvement of market conditions and the intensification of economic competition. On the other hand, it is one of the vital preconditions of successful business that enterprises more capable of doing well and developing faster than others in severe market conditions should earn higher (much higher) incomes. When the income of such enterprises expresses the market's need, and willingness to pay, for their commodities or activities then the resulting higher income provides the opportunity for faster development and the resources needed for accelerating the desirable transformation of the commodity pattern. In this concept it is at the same time implied that the income level of uneconomical business units, unable of

innovation, should be less (much less) so as to be forced to better the quality of their business activities or to reduce their volume.

The magnitude, changes in and degree of differentiation of enterprise incomes are under the influence of several factors, among others eg. the volume and pattern of production, the trend of the per unit costs of production (in particular of material and energy inputs), export-import prices, moreover, the sales market, the changes in domestic producers' prices as well as to a large extent the fact to what extent and in which way the state draws away incomes from the economy or rechannels them under the title of subvention.

Beside factors directly affecting enterprise incomes also *indirect* impacts must be taken into account. Enterprise income positions should not substantially differ from the income position of the entire economy over longer periods of time, however, these differences may be considerable in short intervals. For example, owing to the deteriorating terms of trade, the Hungarian economy suffered heavy losses in the period between 1973 and 1978 which the companies hardly felt as most of the losses were cushioned by the budget. Their income positions remained solid, investment opportunities did not get worse and they continued to raise the wages of the workforce as before. In the meantime, however, the damages caused by the terms of trade (or in other words: the income lost because of their deterioration) was compensated by raising foreign credits whose amount was growing at alarming rate and speed.

The situation changed in the 1980s. Reduction of the volume of debts had to be commenced and also resources had to be produced to cover the interest burdens. Therefore now, and for another couple of years, less income may be used for the implementation of economic objectives than what is generated in the production process. To harmonize the income positions of the macro and micro spheres, in the last resort to assure domestic economic equilibrium, is also the task of the *system of income regulation*.

Enterprise income positions are also influenced by the national economic sector where they belong to. (The reasons lie partly in market impacts, i.e., the actual business opportunities of the given activity, and also in the sectoral differences in price formation and regulation are significant.)

This paper does not, as it cannot, undertake to chart all the factors with a bearing upon the development of income differentials and especially not an accurate quantification of these impacts. It should only like to draw attention to a few symptoms of consequence for the development of differentiation. The analysis covers the period after the 1979–80 changes in prices and regulations, that is, a period that was short but which, from the point of view of the issue, showed a big variety of symptoms and produced different problems nearly every year. Mainly the role of economic macro-processes and of income distribution are studied in the development of enterprise income differentials. At the same time it is attempted to illustrate the important role of factors other than actual efficiency differences and market opportunities in the income position and profitability of the different enterprises.

Income trends on the level of the national economy (1980-83)

The total income of the national economy* increased by over 30 percent during the past four years. (The rate of income growth was not steady; it was recorded to be the lowest, 4.7 percent, in 1980, in the two consecutive years its rate was nearly the same: 8.8 and 8.6 percent, and in 1983 it amounted to about 6.6 percent.)

However, the growth of the volume of production** was far less dynamic but it was much more modest: not more than 4.1 percent in four years. What is hidden behind such a marked difference between net national product at current prices and at constant prices? It is a very important symptom that in the formation of additional income the *increase of prices* was the decisive factor during the said years, and not the increment of production. It could also be said that the rapid growth of income measured at current prices was determined by the rise of prices. In this period more than 80 percent of the additional income originated from higher prices.

The changes in external economic (export-import) and domestic prices affected the income of the national economy in opposite ways. The terms of trade deteriorated every year except 1980 when they were stagnating, and the deteriorating terms of trade reduced the income of the national economy. Export and import prices changed in different ways in the different spheres of the economy and so their impacts also were 'dispersed'. For example, some companies made substantial profits through increasing export prices while they did not feel much of the rising import prices. The whole national economy, however, suffered a heavy loss: the income lost because of rising import prices was namely much bigger than the additional income from rising export prices.

This means that mostly the rise of domestic producers' prices was the source of the additional income that can be stated for the period from 1980 to 1983 (30 percent). That is, the additional income was backed by additional product to a much smaller extent. The situation is made more difficult by the fact that part of the *products* turned out must be used for the improvement of external equilibrium (by increasing the export surplus) and this situation assigns important tasks also to income regulation. It appears necessary to considerably restrict the disposable incomes in order to preserve the balance between the domestic purchasing power and the available commodities, i.e., to prevent a heavier inflationary process. Naturally, the given situation affects the practicable income restricting solutions and the degrees of income taxation and thus it is reacting on the income positions of the different sectors and enterprises.

*On the level of the national economy, income is regarded to be equal to the value (at current prices) of the net national product, i.e., to the sum of the new value produced during a period. Thus the income of the national economy includes labour incomes (v) paid out to the people as the counter-value of work done, as well as the net income (m).

**Net national product at constant prices.

Changes in relative incomes

It was one of the important objectives of the changes effected with respect to prices and regulations in 1980 to assert the foreign trade value judgement in domestic economic processes and to stimulate prompter adjustment to the new external economic conditions. As a first step, on January 1st 1980 the relative producers' prices were changed (the target was to close up to world market prices) and the changes rearranged, in turn, the incomes*) of the different sectors as well as their order according to profitability.

The most characteristic feature of the changes is the radical shift in the relative prices of basic materials and end products. Basic materials and primary energy became significantly more expensive for users and of this additional cost they could not pass on in their starting prices but a fraction in the initial year. This change in proportions was the reason for the different rates of increase in prices of products for intermediate consumption and in starting output prices. In 1980 the price index of intermediate consumption showed a more than 20 percent growth over the year before while the prices of products released "only" increased by 11 percent. Therefore the income lost because of climbing material costs was higher than the additional income originating from higher sales prices: *under the combined influence of price changes the income earned by sectors diminished in 1980.*

The objective of changes in relative prices also included stimulation for saving more material and energy. This process has started and the enterprises partly balanced their growing material costs by reducing the material input of production through some modification of the commodity pattern and reducing the per unit material inputs. In industry, the volume of gross output increased by 3.8 percent while the volume of materials used by merely 1.5 percent between 1979 and 1983. Later on, however, after 1980, the enterprises could pass on most of the increase of material costs in their sales prices.

In 1981, the price index of intermediate consumption of producers amounted to 106.9 percent relative to the previous year and output prices increased at a similar rate (by 106.4 percent).

This means that the increase of material costs was wholly passed on by producers to users in the sales prices, moreover, they earned substantial additional receipts enabling them to increase wages and net income. The raising of wages was allowed, however, only within certain limits set by the system of wage regulation and therefore the bigger part of additional receipts contributed to the net income. In 1981, net income in the sectors of

*The income created in the given period by the different branches and sectors of the national economy are regarded, like in the whole of the national economy, to be equal to the sum ($v+s$) of the new value. The only difference is that here the net income does not contain the balance of taxes on products which cannot be unambiguously assigned to any sector. Statistics therefore treat this separately and only include it in the income of the national economy.

material production was 11 percent (30 billion forints) more than in the year before. Since the volume of production increased in 1981 by merely 2.5 percent, along with declining terms of trade, this 11 percent increase of the net income in itself jeopardized the domestic economic equilibrium, besides being unjustifiable in economic terms. The situation was only aggravated by the *disproportionate distribution of the additional net income between the budget and the economic sphere*. Ft 26 billion from the Ft 30 billion increment contributed to enterprise profits. (Enterprise profits increased by 17 percent over the year before. Knowing our circumstances it needs no further proof that this increase in profit did not express any corresponding increase of efficiency.)

In 1982, the same process repeated itself in price changes, that is, owing to growing prices of materials and energy, production costs increased which the buyers paid for in the prices of finished products. Moreover, the increase of prices assured significant additional receipts. In the two years, however, the destiny of the additional receipts originating from price rises strongly differed: in 1981 it had mostly increased the profit of enterprises while in 1982 by amendment of regulations it was *taxed away* prior to the forming of profit.

This was the objective of higher wage tax raised from 24 percent to 27 percent,* the raising of bank interest rates, the introduction of truck charges, the cutting of subsidies, etc.

Table 1
*Division of the increment of net income between
enterprises* and the budget*

	Billion forints		
	Net income	Increment over the preceding year	From this: increase of enterprise (co- operative) profits
1980	225.1	—	—
1981	254.8	+29.7	+25.8
1982	279.8	+25.0	-2.4

*Economic units (enterprises) of the material sectors.

Taxes were increased of necessity, for the sake of maintaining the domestic balance. However, it may be reasonable here to question the impacts of the tax measures on different sectors and enterprises, although equilibrium between disposable incomes and

*to be paid by enterprises — Ed. note.

the available commodities could be guaranteed on the level of the national economy. The amendments of regulations aimed at reducing the purchasing power (e.g. the increase of the wage tax) cannot be adjusted to the size of additional income, i.e., net income is drawn away also in cases when there is absolutely no or very little chance to profit from inflationary prices. Similarly, the amendments of regulations are unsuited for distinguishing between the sources of additional income, whether it is profit from inflationary prices or is achieved by cutting down costs — although the difference is certainly not immaterial from the viewpoint of the envisaged efficiency.

Division of net income between the budget and enterprises, by sectors

Enterprise profit thus strongly depends on the system of taxation (and subsidy) in a given period of time, i.e., on the share drawn away by the budget from net income, and the portion that is left with the enterprise as enterprise profit. The division of net income between the budget and enterprises varies from time to time and its degree is not uniform in the various sectors and branches of the national economy either. The review hereunder will study the differences by sectors in the share in net income of the budget and the enterprises and how these shares changed during the past years. (Our scrutiny will cover branches of the industry and the agriculture.)

Analyzing the generation of net income and in this context the trend of the share of enterprise profit by sectors, three fairly characteristic groups can be distinguished:

- sectors producing basic materials and energy (mining, electric energy industry, metallurgy, building material industry);
- sectors of the manufacturing industry (engineering, chemical industry, light industry and other industries),
- food economy (agriculture and food processing).

In the case of manufacturing sectors, a smaller portion of the generated net income is drawn away by the state budget and the bigger part (64 percent in 1980) is retained by the enterprises as profit. On the other hand, in basic material and energy producing sectors only 26 percent of the net income becomes profit while the rest is paid into the budget as tax. The difference is related to sectoral features of price formation and income regulation. In the case of the latter group, production taxes play a much more significant role than in the manufacturing industry. For example in 1981, mining realized Ft 25 billion of net income of which it paid Ft 19 billion into the budget as production tax. Within mining production tax was charged on crude oil and mineral gas production and this is related to the current practice of price formation. The point is that, in this instance crude oil and mineral gas extracted locally are valued at the "competitive" world market price, although the domestic costs of extraction are much lower. The difference is "skimmed off" in Hungary by the budget as production tax. Note that here only the tax on domestic production is considered and the tax on import is not.

The sectors of the manufacturing industry are a rather homogeneous group from the aspect of forming profit from more than half of the net income; this share is the lowest in engineering (55 percent) and the highest in the light industry (80 percent). The difference in the distribution of the net incomes between engineering and the light industry originates from the bigger subvention allocated to the light industry than to the engineering industry, although the two sectors paid through various channels proportionally similar taxes to the budget in 1980. The net tax deriving as the balance of taxes and subsidies was finally less in the light industry, only amounting to 20 percent of the net income generated, and another 80 percent became enterprise profit.

In the case of the food economy, owing to peculiarities of the price formation system, the total amount of the net income generated becomes enterprise profit. Here, in the first stage of distribution, the budget has absolutely no share in net income, moreover, it even contributes to the profit with its subventions, i.e., the amount of budgetary subsidies exceeds the amount of taxes.

Table 2
Share of enterprise profit in the net income in 1980

	Net income (billion Forints)	From this: share of enterprise profit (percent)
Sectors producing basic materials and energy		
Mining	26.2	5.4
Electric energy industry	7.2	21.0
Metallurgy	9.7	75.3
Building material industry	4.4	49.3
Together	47.5	26.0
Manufacturing industry		
Engineering industry	30.9	55.2
Chemical industry	17.0	66.6
Light industry	14.4	80.6
Other industries	2.6	65.4
Together	64.9	64.3
Food economy	30.0	...

The above proportions indicate the following which is really worth noting: *budgetary relations in the first stage of income distribution have an enormous influence upon the magnitude of enterprise profit.* Thus profit depends not simply on actual differences in the efficiencies of the different enterprises and on market (business) impacts, but in many cases it depends in the same way or more strongly on the degree and forms of budgetary interference as well.

The division of enterprise profit, i.e., the payment of taxes charged on profit, takes place in the second stage of income distribution. This stage will not be discussed in detail because even though profit is the central category by which enterprise business is judged, the *taxes to be paid from the profit apparently do not appreciably alter the income proportions formed in the preceding stage.*

The income positions formed in 1980 between economic units and the budget were not stable; significant shifts in proportion occurred also in 1981 and 1982.

In 1981, the manufacturing industrial sectors increased their net profit at a higher than average rate (by 18 percent). This increment appeared wholly as enterprise profit; the budget did not share in the increment and thus the share of enterprise profit in net income increased to 71 percent. The case of the food economy was similar: most of the dynamically increasing (by 24 percent) net income contributed to enterprise profits. Basic material producing sectors could only achieve a slimmer increase of their net income (7 percent) and their profit decreased. *Thus, in 1981 the system of income taxation did not assure the proportionate sharing of the budget in the additional income; furthermore, the big differences between sectors increased instead of decreasing.*

In 1982, net income kept increasing over the very high level of the year before. *In the proportions of distribution, however, some change was observed because of the workings of the amendments of regulations aimed at cutting the disposable enterprise income in order to maintain economic equilibrium.*

In the manufacturing industrial sectors by that time only half of the additional income contributed to enterprise profits while the other half was drawn away. It is remarkable, however, that despite the worsening external economic conditions and more severe regulation, in the manufacturing industry profit still increased over the high level of the previous year (in all its sectors except the chemical industry) or at worst stagnated. The share of profit from net income (70 percent) was nearly unchanged, the smallest value recorded (60 percent) was in the engineering industry and the highest (85 percent) in the light industry. In basic material and energy producing sectors the increase of net income was similar to that of the manufacturing industry with respect to both absolute amount and percentage. However, the enterprises had absolutely no share in this, on the contrary, their profit decreased. The share of enterprise profit in actual net income consequently dropped to 17 percent.

The aforesaid is intended to back up the statement that the extent of enterprise profit was powerfully influenced by sectoral features. These differences were not diminished but strengthened by the amendment of regulators in the past years. For this reason enterprise profit as the standard of assessing economic efficiency can only be accepted in the context of most minute analysis made with careful circumspection.

Profitability trends on enterprise level

Our scrutiny must cover not only the volume of profit and its proportion within net income but also the magnitude relative to the resources engaged. This is usually characterized by the profitability indicator. That is, profitability expresses the utilization of capital invested and workforce engaged for the purpose of production. To measure profitability, the profit proportional to resources has been used, where profit is in the numerator and the aggregate sum of fixed assets and annual wages figures in the denominator.*

The price revision and the amending of regulations in 1980 were deliberately aimed at cutting back profit rates and thus profitability also decreased. Under the impact of amendments profit changed with marked differences in the different sectors. These changes levelled off the big pre-1980 differences in profitability.

Prior to the price revision of 1980, in the year 1979 the profitability of the manufacturing industry was far higher than the national economic average, while the profitability indicator of the food economy fell below the average; the extracting and basic material producing sectors showed a mixed pattern. The profitability of the electric energy industry was much below the average; the profitabilities of mining and the building material industry were much higher than the average but still less than the average, while that of metallurgy was slightly higher than the average. In 1980, under the influence of price adjustments and new regulations, the profitabilities of sectors showed smaller differences and, consequently, the role of adherence to a sector somewhat decreased in the differences of enterprise profitabilities but was not eliminated.

The profitability indicator was affected by the changes in profit (figuring in the numerator of the indicator) and in resources engaged (which are in the denominator of the indicator) together. In short periods, however, and especially when the opportunities of accumulation are as limited as they have been lately, profit plays a determining role from the point of view of the profitability indicator.

The profitabilities of the different sectors were levelled in 1980 as against 1979 under the influence of price adjustments and amendments of regulations and, therefore, the profitability differences between enterprises diminished. Although the change in the profitability of a given enterprise is also influenced by a number of other factors, the role of belonging to a sector is so powerful that the range of enterprise profitability was also diminished by the reduction of sectoral profitability differences. A greater number of them were closer to the average profitability level than earlier. Fewer enterprises reached extraordinarily high (20 percent or higher) profitability.

In 1981, owing to the dynamic (17 percent) growth of profit, profitability increased and the sectoral proportions somewhat shifted. Manufacturing sectors recuperated most of their lost advantages. In 1982, sectoral proportions were again very similar to the state of affairs prior to the price revision, although differences were

*This is a special definition of the profit-rate. (Ed)

Table 3
Profitability and enterprise profit in 1979–1980

	Profitability in 1979, percent	Change of enterprise profit in 1980, in per- centage of the previous year	Profitability in 1980 percent
National economy, total	10.5	97.2	9.5
Manufacturing industry			
Chemical industry	16.6	69.8	10.6
Engineering industry	16.5	60.0	9.4
Light industry	12.7	92.9	11.5
Food economy			
Agriculture	5.7	124.8	6.6
Food processing industry	7.2	159.0	10.4
Production of basic materials and energy			
Mining	6.6	46.3	2.9
Electric energy industry	1.0	245.5	2.2
Metallurgy	11.3	110.5	11.0
Building material industry	7.8	73.1	5.0

somewhat milder. The profitability of manufacturing sectors was substantially higher than that of other sectors. The food economy again dropped well below the average while the profitability of basic material producing sectors was only half the national economic average. The dispersion of enterprise profitability followed the tendency of changes in sectoral differences.

Finally, if profitability and the share of profit in net income is compared by sectors, it can be stated that under the present conditions those sectors appear to be the most lucrative wherefrom the smallest amount of net income is drawn away by the budget. Or, to put it in another way, it is paradoxically the least profitable sectors that are paying the highest taxes to the budget. This means that *the Hungarian system of taxation (subvention) significantly diverts national economic profitability from enterprise profitability.*

Profitability of the "three markets"

Enterprise profitability is also influenced by the market where the products are sold. Therefore, the enterprises yearly calculate profitability separately for the different markets. (In this approach profitability means profit relative to price receipts). In 1982

somewhat more than 80 percent of enterprise profits originated from the domestic market and about 9 percent each from rouble, non-rouble exports. *During the past three years there was not any appreciable change in the profitability of domestic sales while the profitability of rouble exports increased and that of non-rouble exports robustly decreased.*

The Central Statistical Office has recently made analysis of the profitabilities of enterprises where exports represent an important weight. This was done with good reason considering that the group of unsuccessful enterprises includes in Hungary a big number of firms strongly involved in export and therein big volumes of exports to the west. It is therefore not irrelevant to reveal the correlation between exports and profitability. The study covered 52 industrial enterprises which represent a share of 50 to 80 percent in the export price receipts of their respective sectors. The purpose of the study was to state the influence of the volume of and changes in export upon profit, with respect to the year 1982.

The most important statements of the study can be summarized as follows:

a) It could be demonstrated for a group of enterprises that the high share and growth of non-rouble exports caused a decline of total enterprise profit. (To this group belonged 11 percent of companies covered in the study.) In another group, the share of non-rouble exports decreased and total enterprise profit simultaneously increased. This statement holds for 10 percent of the enterprises concerned. That is, in more than 20 percent of the enterprises covered in the study there existed a *negative correlation between the changes in western exports and total enterprise profit.*

b) The profitability of enterprises covered in the study was below the industrial average in western exports. Export price receipts increased in the whole industry whereas they decreased with the selected big exporters, i.e., in 1982 smaller exporters could increase their exports more successfully. Important conclusions can be drawn from this: among others, that the reserves of increasing exports are being depleted in the case of big exporters, i.e., that the boosting of exports is often carried out with declining profitability. (30 from the selected 52 companies increased non-rouble exports. In more than half of these enterprises, in 17 of them, export profitability decreased.) But the point is not just that. According to the current regulations of price formation the disadvantage is extended to the *entire* activity of the enterprise, as in the competitive sphere also domestic producer prices depend on export profitability.

However, the profitability of non-rouble exports worsened not only in the chosen companies but also with respect to all enterprises (amounting to 11.3 percent in 1981 and to 8.9 percent in 1982). Profitability was reduced by the interaction of several factors. Although in 1982 the forint was devalued by 7 percent* against the dollar, i.e., the exporters collected 7 percent more forints for a unit of export, but the effects of the new rate of exchange towards higher price receipts were neutralized by decreasing prices in terms of foreign currency. The export price level measured in forints and containing the

*Computed on the basis of the average rate of exchange weighted by turnover.

impacts of both price changes and the changing rate of exchange was stagnating as against the year before.

The enterprises could thus not achieve price gains from commodities sold in the western market, that is, the growth of their production costs could not be passed on to buyers in this field.

(Beside the growing expenses of materials and energy, costs were also increased by wage taxes.) The additional costs reduced profits attainable in the non-rouble markets.

Correlation between enterprise size and profitability

Within the industry as a whole, the biggest enterprises were studied in more detail to reveal individual differences in the background of the profitability trend and the factors affecting enterprise profitability levels. It also was an objective of this investigation to state the degree of influence of budgetary intervention on the profitability of industrial enterprises.

The analysis carried out by the Central Statistical Office included the biggest industrial enterprises in the order of the average fixed assets in the year 1981, i.e., those operating with an average value of fixed assets exceeding Ft 1.5 billion. During the past two years 94 of these enterprises worked in identical organizational frameworks.

Table 4
*Weight of the biggest enterprises in the output value
and profit of sectoral production*

	Number	Share within the sector in		
		the value of net		
		product of the	profit	percent
		enterprises studied percent 1981	1981	1982
Mining	10	88.3	72.1	75.8
Electric energy industry	11	82.2	76.2	44.4
Metallurgy	11	65.4	4.9	...*
Engineering industry	22	45.6	43.7	45.1
Building material industry	3	53.4	40.8	45.2
Chemical industry	16	64.2	65.2	64.5
Light industry	9	20.1	21.7	24.5
Food industry	12	34.2	22.7	18.0
Industry, total	94	52.2	39.2	38.8

*The profit of this sector was Ft 2.6 billion and of the enterprises studied Ft -1.0 billion forints (i.e., a loss).

The big enterprises covered in this study increased their profit by 13 percent in 1982. In this year also the profits of big enterprises decreased like in the entire industry, and the rate of decrease amounted to 2.9 percent. Profit decreased by 1.6 percent in the whole of the industry, i.e., *the profits of big enterprises decreased more markedly than in the whole of the industry.*

Owing to the decrease of profit also the profitability of big enterprises fell from 7.1 percent in the year before to 6.7 percent. *Their profitability level was 2.8 percentage points below the industrial average in 1982.*

(With the exception of mining, the profitability of big enterprises was below the sectoral average in every sector. The biggest differences could be found in metallurgy, the light the food-processing and the chemical industries. Big enterprises fell below the sectoral average in this order by 4.9; 2.7; 2.1; and 1.9 percent. In these sectors poorer profitability was attributable to the significant weight of exports by the big enterprises and to the unfavourable development of their export profitability in the first place.)

Big enterprises were classified in six groups on the basis of profitability in the two years. The scale of profitability ranged between 0 profitability (or a loss) and a ceiling of more than 20 percent profitability.

In the first two low-profitability zones more than 60 percent of the decrease of profits was *related to non-rouble exports* while the rest of the decrease occurred in the domestic market.

The direction and degree of enterprise shifts from the average was different by sectors in the various profitability zones. By 1982, the *engineering* enterprises included in the analysis increased their average profitability. This improvement was attained by those enterprises which sell mainly in the domestic market and export to the rouble area.

The average profitability of the *light industrial* enterprises also improved which was due mainly to the profitability of domestic sales. The additional profit earned at home was sufficient to balance for the relative loss in rouble exports. It is worth noting that the bigger ones of the enterprises covered in the study were relatively more profitable in this sector.

Enterprises of the *food industry* dropped into lower profitability zones in 1982. In 1981, five companies with higher than 15 percent profitability contributed 72.3 percent of the value of output of the food industrial companies covered in the study. By 1982, one single enterprise was left in this zone (with 9.3 percent of the value of production) while the others dropped to lower profitability zones.

Profitability and budgetary relations of big enterprises

Big enterprises were allocated Ft 15.4 billion of subvention and the amount of Ft 50.9 billion was drawn away from them by the budget in 1982, that is, budget gained 35.5 billion forints surplus receipts from this sphere. To obtain a more realistic picture

Table 5
*Value of production, budgetary relations and profits
of industrial enterprises (1982)*

	Net product	Budgetary			Profit
		subventions	levies	balance	
Billion forints					
Big enterprises	127.1	15.4	-50.9	-35.5	30.0
Other enterprises	112.6	20.6	-25.0	-4.4	47.3
Total	239.7	36.0	-75.9	-39.9	77.3
Distribution, percent					
Big enterprises	53.0	42.8	67.1	89.0	38.8
Other enterprises	47.0	57.2	32.9	11.0	61.2
Total	100.0	100.0	100.0	100.0	100.0

*In the analysis of the budgetary relations of big enterprises, the subventions and levies preceding the formation of profit were taken into account. Interest rate payments were not reckoned with as such payments can be regarded an element of net income only on the level of the national economy.

it will be advisable to compare the budgetary relations of big companies with such relations of the other enterprises.

More than half of the net output of the industry was produced by the big companies and they give more than 2/3 of payments to the budget (before the distribution of profit). On the other hand, their share in subventions is smaller than that of the other enterprises both in absolute terms and as regards proportion. This unequal budgetary relation plays a great role in the apparently poorer profit of big enterprises than of the others and this might lead to fallacious conclusions.

It is rather widely believed that big enterprises enjoy substantial subsidies in Hungary on the basis of their advantageous positions in the national economy. This analysis seems to testify that the real situation is just the opposite. When not only subventions but also levies (taxes) are taken into account, as they certainly have to be, then these latter ones are decisive from the point of view of big enterprises. At present the budget draws away a bigger share of the net income produced from big enterprises than from the other ones. It is an important and commanding task to explore the reasons and consequences of this symptom in detail. Here only a few ideas are noted to inspire scrutiny:

When the budgetary position of big enterprises is considered *from the aspect of subventions* it is not a negligible point that they comprise a *relatively big number of enterprises that traditionally get no or small subvention* (e.g. electric energy industry, milling industry).

Approaching the matter from the aspect of levies it is apparent that the special price formation rules in some sectors (formation of primary energy prices and introduction of the connected levies) are an essential point in judging the levies from the sphere under study.

There is a remarkably *big number of big enterprises* (in the engineering and the light industries) *powerfully affected by the steady increase of the wage tax* (by 3 percentage points per annum since 1980) due to their high live labour intensity.

It may happen that a few big enterprises are included in the analysis where the subsidy appears at the centre of the trust (holding company), that is, in a sphere beyond the scope of the study. In this event the *comparison* of the sphere under study to the other companies may be somewhat *distorted*, but *this is not so significant as regards its magnitude as to cause any radical literation in the validity of the trend outlined*.

To sum up the aforesaid it may be stated that enterprise differentiation is very strongly influenced by macroeconomic factors such as the changes in the income position of the entire national economy, the rules of price formation and control and, with respect to the latter, by the sectoral characteristics.

The price adjustments and amendments of regulations of 1980 brought about palpable positive changes in both relative prices, adjusting prices more closely to the requirements of international standards, as well as in reducing profitability differences among the different sectors. The bearing of adherence to a sector has somewhat diminished in the income differentials of enterprises and thus the actual differences in efficiency are more preponderant. However, these favourable outcomes asserted themselves only for a short while and in fact they could not unfold and consolidate. Starting from 1981 enhanced interference on the part of control and taxation was required in order to maintain the external and internal equilibrium of the economy and this was expressed in repeated and significant modifications of the forms of drawing away incomes. Enterprise profit and profitability were so severely affected by these changes *that these indicators alone are not sufficient for a realistic assessment of enterprise economic management*.

The optimum proportion between the state and enterprises in the division of net income, i.e., the magnitude of deviations from the average justified by sectoral characteristics, is a hard question. It still seems that differences are today exaggerated and this is the reason of the awkward situation where, judging by profit, *the enterprises stated to be the most profitable are the ones which enjoy greater facilities in the present tax (subvention) system*.

This also means that income differentiation deriving from actual efficiency differences has not been as effective as it had been anticipated and desired. Among other things, these are the problems which are hoped to be rectified and resolved by the current work done in the framework of the complex refinement of economic control and management aimed at the further development of economic regulators.

BOOK REVIEWS

AUGUSZTINOVICS, M. (ed.): *Long-term models at work*. Akadémiai Kiadó, Budapest 1984. 385 p.

The theory of socialist (central) economic planning has always emphasized the need for simultaneous planning of the socio-economic development for time horizons of various length to thus secure an intertemporal coordination of long-term social goals and short-term economic decisions. This principle has, however, often been neglected in planning practice, which gave almost exclusive priority to one or another time horizon depending on the needs of the actual system of economic planning and management.

Long term (15–20 year) planning has for long remained absent from the planning practice, despite the fact that the very first nationwide economic plan in Soviet Russia (GOELRO) was a strategic conception looking into the distant future. National planning soon became primarily occupied with the operative, short-term problems of the emerging overcentralized economic management system. The Hungarian national planning practice was no exception to this general tendency. Until the 1960s annual planning was the dominant element of the planning system. It is hardly surprising that in the discussions about the overall reform of the economic control and management system the shift of emphasis from the annual to medium and long-term planning was a central issue.

The first major effort to work out the principles and conceptual framework for long-term (15–20 year) planning in Hungary started in the late 1960s. The new and challenging task appeared in a period when mathematical models had already been utilized in the process of the medium-term planning. Mathematical model

builders have also been involved in the preparation of the 1975–90 long-term plan. This book gives an account of this modelling experience. It focuses on the models which were developed and utilized in the quantification and evaluation of the proposed long-term development alternatives. At the same time the book also gives some insight into the historical and planned development tendencies of the Hungarian economy and discusses some issues related to the theoretical and methodological problems of long-term planning. The book and the work reported in it is a result of a collective effort led and coordinated by the editor. The individual chapters were written by those mainly responsible for the given area.

As mentioned above, long-term planning activity started almost from scratch in the late 1960s. There had not been any firm theoretical or methodological basis on which it could have been founded. It was not clear in what respects it is the same and in what respects it is different from the more established (although constantly changing) shorter-term economy-wide planning system. From the modellers' point of view the important question was to find out where and how formal models could be of real help to planning experts and what kinds of models could be used.

The first three chapters of the book reflect the editor's views on these and related issues, and thus serve as a theoretical and methodological introduction to the subsequent chapters which describe the formal approaches actually chosen. The author views the economic system from what can be called an activity analysis standpoint: a set of separable but interdependent elementary activities aggregated into groups of various kinds. They form *parts* of the *whole* economy, where each part is characterized by an

internal mode of operation. The parts are mutually related to each other through a system of external relations, which in the author's view, can mostly be described by the structure of inputs and outputs. These internal and external relations form the structure of the economy, and the structure and the level of all the parts together determine the state of the economy as a whole.

Within the above conceptual framework the author defines the task of national economic management as that of planning and control. Planning is concerned with harmonizing and "optimizing" individual (partial) decisions from the point of view of the whole economy, whereas the task of control is to ensure that the desirable decisions will be implemented. Planning is more than forecasting in that it not only makes conditional forecasts, but sets objectives and prepares decisions as well.

Long-term planning is a continuous activity; in practice, however, some periodicity has to be introduced in order to achieve coordination with the medium-term (5 year) planning and to prepare concluding documents for given periods of time. The author distinguishes three major phases in economy-wide planning. The first is elaboration of the macroeconomic concept, which prepares and guides partial investigation. The second phase comprises the outline of the future development of the parts. And finally, in the third phase (called synthesis) the first two phases are linked together to form a unity. The author briefly surveys the nature and tasks of the various work stages and their mutual relations.

Chapter Three (Quantitative synthesis in long-term planning) is a comprehensive survey of the various formal models and analyses applied during the preparation of the 1975-90 long-term plan of the Hungarian economy. The general characterization of the models is preceded by a brief review of the traditional process of plan coordination (synthesis) and by a short history of the use of input-output and linear programming models parallel to or integrated into the traditional planning process.

The experiences gained in shorter-term modelling have certainly influenced the thinking of the long-term planning models' builders. This can be seen from the choice of priority as well, which

was to concentrate on developing models to help the coordination work, i.e. the quantitative synthesis. The original idea rested on the assumption that expert planners will generate a sufficient number of partial variants and the models could be used to generate several consistent macro-variants. This explains the choice of one-level central economy-wide models. Because one single model would not have been capable of taking into account all major aspects of the evaluation and assessment of the development alternatives, the need for a set of complementary models arose quite naturally. They can roughly be divided into two categories: decision models and models of further analysis. The author (the chief architect of the modelling exercise) gives her own review and evaluation of the models and tools used in the formal part of long-term planning. Such an account is always interesting to read, because it implicitly reveals much more about the ideas and discussions surrounding the modelling effort than a mere study of the models themselves.

One particular point, which clearly distinguishes an economic modelling exercise done within the framework of the sophisticated, traditional planning environment, from other types, deserves special attention here. And this point comes through clearly in the discussion on the issue of what type of model and in what role it should be used. Modelling within a complex planning machinery has to take a rather modest position, if it wants to be successful. Modest in the sense that it should conform to the greatest possible extent the overall methodology and phasing of the general planning procedure, it has to rely as much as it can on the same information basis and make the utmost effort not to become a sterile academic exercise, alien to the way of thinking of the traditional planners. The readers have to keep this point in mind in order to properly understand the dilemmas of a planning modeler within a central planning office.

Chapters Four and Five (by Ildikó Krekó describe a model and some computation experiments with it, that has played the central role in the quantitative synthesis. The model (called WHERE) is formally a linear programming model, rather similar in its conception to such models used in plan coordination in earlier medium-term

planning exercises. The underlying idea was that formal models could hardly compete with planning experts (owing to the lack of information and time as well) in preparing alternative partial development variants for various areas of the economy. Therefore, formal models could be more usefully applied in the process of evaluation of and selection among the partial variants in the central coordination phase.

What makes the "WHERE" model different from its predecessors in Hungary derives mostly from the difference between medium- and long-term planning. The medium-term plan coordination models were usually static models, securing consistency only for the terminal year of the plan period. The WHERE model, in conformity with the general methodology of long-term planning, breaks down the fifteen-year period into three five-year periods. Accordingly, the consistency criteria are partly formulated for the individual five-year periods as a whole and partly are concerned with the intertemporal consistency of the development alternatives. Similarly, the variables and the constraints of the model fall into two basic groups: intertemporal ones and those defined for single periods only. Almost all of the variables except the foreign trade ones fall into the first category, which indicates that the model did not allow much freedom for changing the dynamics of the partial variants.

The model was based on the main concepts of the input-output accounting system and distinguished 31 sectors. Apart from the variants embracing the given sector as a whole in value terms, the model included some selected products of primary importance as well. The sectoral variants specified the volume of production and investment, the input requirements for current production and accumulation purposes for all the three five-year periods. Beside the sectoral production variants the other major components of the model were variants corresponding to foreign trade activities and consumption pattern. The constraints of the model included the usual balance conditions for various commodities, constraints on the foreign trade variables and special constraints assuring harmony between some selected variables.

The data base of the WHERE model was provided by the partial variants elaborated by

planning experts responsible for the specific parts. Unlike it was originally hoped for, the planning experts have eventually come up with only a single "realistic" variant for each part. It is an interesting observation and worthy of further investigation that there seems to be an inherent obstacle that prevents planners from thinking in terms of equally realistic alternative variants at one time. This lack of partial alternatives has to a large extent changed both the character of the model (one cannot really speak about a "decision" model in such a situation) and its originally planned specification.

The WHERE model was used for two types of exercise. First, it was used to coordinate the partial development variants into a consistent macrovariant. Because of the lack of alternative variants, this coordination was only made possible by allowing both the realization level and the structure of the variants to change within some carefully set limits. The original variants failed to satisfy the consistency criteria specified in the model by rather large margins. Unlike in a similar static coordination exercise, the modellers had to face the crucial problem of retaining the essential features of the dynamic trends foreseen in the basic variants and assure at the same time a smooth transition from the base period to the plan period. These goals were achieved by allowing the zone of movement of sectoral variants to expand like a "cone", i.e., allowing for gradually larger movements over time. In the first stage the primary goal was to relax these constraints on variation only to the extent necessary to find a consistent combination of partial variants. This constantly updated basic macrovariant then became the reference solution of the subsequent series of computations.

The second type of exercise was concerned with the quantitative characterization of the effects of various factors that influence the long-term development of the economy. Thus, among other things, the effect of increased efficiency of fixed capital utilization, foreign trade price changes, greater freedom in changing the foreign trade patterns, alternative consumption preference structures were analyzed. The interested reader will find several examples and numerical illustrations of these types of exploratory analysis. The authors are quite aware of the

fact that such kind of analysis is more appropriate for the tasks of macroeconomic analysis at the start of the planning exercise, than for the tasks of the synthesis. Nevertheless, a few selected exploratory macrovariants generated in the above way were channeled back into the traditional process of planning and apparently proved to provide the planners with some useful additional information.

The second model of the "decision" type, reported in *Chapter Six* (by Péter Bod), the DYNAMIC also belongs to the family of multi-period, multi-technological models based on the input-output accounting framework. The DYNAMIC model, like the original version of the WHERE model, was also designed to select from among partial variants elaborated by planning experts. What made DYNAMIC different from the original version of WHERE was that it separated the capacity development (investment) part from the production part of the proposed variants and considered only the development part as an indivisible unit, the object of selection. Thus, the model focused attention on the sectoral production capacity development and derived from them the feasible levels of production, consumption and foreign trade. The model contains both continuous and integer variables and it also divides the fifteen-year plan period into three five-year subperiods. The treatment of consumption and foreign trade, as well as the constraints, are essentially the same as in the case of the WHERE model.

The lack of alternative partial variants made it difficult to provide the DYNAMIC model with enough data. Nevertheless, the model-builders made use of some alternative variants elaborated in the early phase of planning, which were later not checked by planning experts and therefore not quite reliable. Through increased flexibility the model produced in all cases development variants that implied higher production and consumption possibilities than the solutions of the WHERE model. Because of the lack of data the computations based on the DYNAMIC model served first of all methodological purposes. The main issues addressed were the effects of discounting and intertemporal rescheduling of investment outlays. The numerical examples presented in the book suggest that discounting had a

more significant effect on the economic structure than rescheduling. The various computations are analyzed and illustrated in several statistical tables.

Chapter Seven (by Tivadar Faur) describes the third decision model, the LAG model. The name is intended to indicate that the specific feature of the model is a more sophisticated lag structure taken into account in modelling investment processes. In accordance with this, unlike the previous two models, the LAG model represents the economic activities over the fifteen-year plan period in an annual breakdown. The most important relationship of the model variables is that between production and investment variables. The development of production determines the necessary expansion of fixed assets. It is assumed in the model that the new capacities which will be put into operation in any given year, determine the investment demand in the previous years (backward scheduling). The distribution coefficients associated with the investments put into operation in a given year characterize the realization concentration of the individual investments.

The LAG model is a continuous linear programming model and, apart from the special relationship related to the investment process, it is structurally rather similar to the previously reviewed models (the same type of variables and constraints). Most of the (annually changing) structural parameters and constraints of the model were computed on the basis of the coordinated macrovariant produced by the WHERE model. The investment lag coefficients were determined on the basis of statistical observation and were modified in view of envisaged changes in the realization concentration.

The LAG model and the investment description framework contained in it was then used for several purposes. The descriptive model was employed to analyze the macrovariant from the point of view of the planned efficiency of investment processes (comparing the relevant investment indicators of the macrovariant with those generated by the investment model using the base realization coefficients). The computations based on the linear programming model generated growth paths following development year by year, whose aggregated characteristics

essentially agreed with those of the adopted macrovariant. In this way the model was used to check the dynamic feasibility of the temporally aggregated processes, and, what is equally important, their compatibility with the already started (base) development processes. As a matter of interest, the model computations indicated some discontinuity in this respect, reflected by the slower growth rates it produced for the first five-year period as compared with the base macrovariant. The model has also produced fluctuations in investments (most other variables were forced to develop smoothly by special constraints) which can be mostly attributed to the five-year constraints on indebtedness.

The remaining chapters report on a follow-up synthesis and analysis of solution of the decision models, as well as on complementary analysis. *Chapter Eight* (by György Boda) discusses the use of static input-output models in the analysis of macrovariants. The analysis covers a twenty-year period (a five-year base period in addition to the plan period), represented by cumulated data for the first and last five-year periods. Different variants of the input-output models were used to investigate the changes in the direct and indirect interrelationships of some salient segments of the economy. Special attention was paid to foreign trade, to the so-called competitive (material) and noncompetitive (infrastructural) spheres of the economy. The very professionally done standard input-output analysis usefully summarizes and complements the results of the decision models.

Chapter Nine (by Ferenc Bánhidi) reports on some price computations related to the central computations in long-term planning. The role of the price calculations is rather limited, it is by no means a long-term price planning exercise. Rather than that, the model investigated how the macrovariants, drawn up in volume terms, and their assumption about technological development, foreign trade, investment and consumption patterns change the input requirements of the sectors and, consequently, the relative prices. The model calculated prices based on the principle of uniform (normative) return requirements, so-called input-proportional prices. Part of the sectoral net income was assumed to be proportional to wage costs, the other part to the value

of capital tied up. The price model was defined in terms of a closed, dynamic input-output system and it contained several novel features, which made it different from similar price models developed by others.

The comparison of price indices calculated for the base and the final period reveals that the envisaged long-term development implies significant shifts in relative prices. Another purpose of the computations was to provide some information for actual price formation policy both in the shorter and the longer run. From this viewpoint comparison of the input-proportional prices with the actual base prices gives some useful information. In this respect the findings of the reviewed study are reinforcing the major results of similar price calculations in Hungary. Readers interested in price modelling will find this chapter interesting from both theoretical and practical points of view.

In the logic of the content matter *Chapter Eleven* (by Katalin Haraszti) could be better placed immediately here, because it is also concerned with input-output analysis of both quantity and price relationships but in an international setting. The information basis of this exercise was also rather scarce, because of the lack of standardized input-output tables. Therefore the analysis is very tentative and somewhat arbitrary. In the course of the analysis data for eight countries were compared with the Hungarian data for 1970 and 1990. Differences in price systems were partly reduced by using input-proportional calculative prices instead of actual ones. This method deserves probably more attention than the analysis itself.

Finally, *Chapter Ten* (by Magdolna Ács) analyzes the macroeconomic development of the Hungarian economy in a broader perspective, first of all by comparing observed past and planned future development. Time series of some selected indicators concerning production, consumption, accumulation, employment and foreign trade and related measures of factor productivity are analyzed from various aspects. Trends of individual time series were compared with actual development only to conclude how poorly simple trends explain actual changes. Later a quasi-dynamic Harrod-Domar-type of growth model (with parameters varying over

time) was developed (MACRO) and numerically solved for the period of 1950–1990. This chapter can be of particular interest to a reader who wants to get a comprehensive macro picture of the significant structural changes that occurred in Hungary after the industrialization process. The analysis covers not only global aggregates, but some major sectoral aggregates are also investigated.

All in all, this book is an interesting account of an attempt to use formal models, integrated as much as possible into the more general framework of the first serious long-term planning exercise in Hungary. Readers familiar with previous modelling efforts in Hungary will find a remarkable continuity of some earlier modelling concepts and get an insight into the current state of affairs since most of the models are still at work in modified forms and used in the process of medium-term planning. The book also reveals much about the environment of modelling, which shapes the primary concerns and goals of the model-builders. At the same time the book might be usefully studied by economists interested on a more general level in the development of the Hungarian economy.

E. ZALAI

Public finance in Hungary. Vol. 1–18. Budapest 1982. Ministry of Finance.

In 1982 the Hungarian Ministry of Finance launched a series of publications presenting state finances to foreigners in the English language.*

The series provides information to foreign economists and financial experts as well as to international institutions and organizations maintaining connections with Hungary. The editors of the series were of the opinion that by publishing an informative series reviewing the most important documents relating to financial policy and the relevant legal regulations together with the financial structures prevailing in everyday life and their developments, they might contribute to satisfying the interest in Hungary's economic and

financial system which has greatly increased in recent years. Every booklet in the series discusses an independent topic, presenting the basic problems and main development processes of public finance.

The first of the series was the "Act on public finance". This reviewed in detail Act II of 1979, which surveys the role of public finance, of economic policy and national economic planning, the tasks and decision-making system of the state executive and public administration bodies in directing finances, the fiscal relations of the state, its institutional system and financial control. In this framework the structure of the state budget, the budgetary management of local councils, international finances, the banking system and the monetary management of budgetary organs are surveyed. Further chapters discuss the financial system of enterprises and other economic units, the management of state property, book-keeping, as well as the financial information system and control (auditing).

Booklet 2 is "The system of economy-wide planning". Economy-wide planning is governed by Act VII of 1972 on national economic planning. Following the structure of the Act, the booklet reviews the contents of the plan, its structure, its decisions and implications, as well as long-term, five-year and annual plans. The second chapter discusses planning work and international relations in planning. The chapter on the scope of authorities related to planning reviews the tasks and responsibilities of the National Assembly, the Council of Ministers, the Planning Commission, the Economic Commission and the National Planning Office. The chapter on the obligation to draw up plans surveys the plans of enterprises, cooperatives and local councils. The last chapter reviews the tasks to be carried out in implementing the economy-wide plan.

Booklet 3 of the series is about "State-owned enterprises". The basic law on state enterprises is Act VI of 1977, modified in 1981. The booklet surveys, on the basis of these acts, state enterprises and other economic units, the conditions of foundation of an enterprise; enterprise organization and management. The control of enter-

*The booklets of the series may be obtained from the Secretariat of the Ministry of Finance, or from Kultura Foreign Trading Company (H-1389 Budapest, P.O.B. 149).

prises and their liquidation, as well as certain particular types of state enterprise, are discussed. A table reviews the role and organizational setup of state enterprises. At the end of the booklet a brief review is given of the major economic units which are not owned by the state.

Booklet 4 is entitled "Rules for connections with Hungarian partners". It deals mainly with the relations formed between and maintained by foreigners and Hungarians, first of all those created by trade in commodities and services and in the course of cooperation, as well as about the possibilities of establishing the latter. In this framework the general rules for establishing connections with Hungarian firms abroad and in Hungary, those relating to maintaining connections with foreigners, the prescriptions governing Hungarian foreign exchange management as well as the rules of commercial law are reviewed. There is a separate chapter on the standing representation of foreign financial institutes and on economic associations with foreign participation. At the end of the booklet there is a list of organs which are competent in matters of foreign exchange and which decide about demands on merit. Some foreign exchange regulations affecting Hungarian citizens are also given.

Booklet 5 reviews "The social insurance system". The subject is discussed in two large: first general, organizational and financial questions and then the main characteristics of social security benefits, the system of conditions and the extent of the benefits. In the first one social insurance coverage is reviewed, together with its budget system, the contributions and the organizational setup of social insurance. The second part provides information about the benefits related to the bringing up of children, the benefits available to those of working age and the system of pensions.

Volume 6 is about "The Hungarian state budget in the seventies." The first chapter surveys the Hungarian budget system, which is divided into the central budget and the budgets of the (local) councils, as well as separate government funds. Next the functions of the budget, budgetary management in the seventies, revenues and expenditures, as well as further development of the budget system are reviewed. The numerical annexes provide information a-

bout the balance of the budget, the composition of revenues and expenditure, the distribution of budgetary bodies, details of public expenditure, and a review of the changes in the structure of the state budget over 10 years.

Volume 7 discusses the "Income regulation of Hungarian enterprises". First the authors review the subject in general terms and indicate the scope of income regulation. The second chapter deals with the price mechanism, the third with exchange rates. This is followed by the general rules of profit taxation, the formation of various funds, special financial instruments (subsidies and levies), as well as the handling of losses and lack of funds.

Booklet 8 reviews the "State Budget 1983". First the public statement by István Hetényi, Minister of Finance, is given, together with the justification for the 1983 budget.

The volume contains five annexes with tables showing the balance of the budget, its structure, the composition of revenues and expenditure as well as the distribution of public expenditure.

Volume 9 reviews "Fiscal policy affecting the private sector and the population". It provides information about the framework and conditions as regards small-scale activities, private artisans and tradesmen, and the new forms of enterprise introduced in the early eighties. A separate chapter is devoted to the taxes levied on the private sector and small-scale enterprises. In this framework the general income tax, the income tax levied on intellectual activities, on household plots and complementary farms, taxation on property transfers, death duties as well as motor car taxes and the municipal contribution of the population are reviewed.

Volume 10 discusses the "Finances of agriculture". Four chapters review the characteristic features of agriculture and food production, the economic regulatory system in agriculture, the role of organizations and institutions directly linked to agriculture in the financing of agricultural production as well as government control and the representation of interests. Within these chapters, among other things, food production and exports, the price system of farms, their taxation, the taxes on household plots and complementary farms, the financing and crediting of large-scale farms, agricultural associations,

research institutes, small-scale ventures as well as organs representing particular interests, and state control are surveyed.

The "Financial conditions of housing" are reviewed in Volume 11. The first chapter reviews the forms of housing, including the state allocation of dwellings, private residential construction and other forms of acquiring dwellings. The second chapter discusses the financing of housing investment and the financial conditions relating to the building and purchasing of homes. The third chapter surveys the rents of state-owned flats and compensatory payments, as well as the financing of the renovation and modernization of flats. Chapter four investigates the order of trade in real estate and the institutionalized forms of exchange, sale and purchase of dwellings. The last two chapters deal with local forms of support and the supply of land building plots for residential purposes.

"The accounting system in Hungary" is the subject of Volume 12. The first chapter gives a historical survey of the development of accounting up to the present time, including the laying of foundations and the development of socialist bookkeeping. The next chapter shows the connection between economic reform and accounting; here, among other things, we can read about the legal regulations governing bookkeeping. Chapter three is concerned with the system of bookkeeping, chapter four with the rules of financial statements, while the next one reviews the calculation of production costs. The last chapter deals with the processing and utilization of data contained in financial statements.

Here we can also read about tax returns, economic and financial auditing and the computer processing of data.

Volume 13 reviews the "Finances of enterprises", under the following headings: legal and financial conditions of the foundation, operation and liquidation of firms: general rules of money circulation; the order of financing enterprises; enterprise finances related to foreign trade; pricing and the calculation of production costs; financial and economic auditing of enterprises. In the first chapter the problems related to the foundation and liquidation of enterprises, the special forms of enterprises (trusts, holding companies, affiliates, cooperatives etc.) are reviewed.

In the second, information is provided on bank account contract, and the rules of repayment; the third covers the management of working assets and the financing of investment projects.

Volume 14 is entitled: "How to finance investments — experience in Hungary". There are four chapters and as many annexes. After a general survey, information is provided about the scope of government investment, the system of financing, the financing of enterprise investment projects, and other forms of capital flows and financing. The tables attached to the volume survey, among other things, GDP and investments between 1970–1982, and distribution by branches of investments in the state and cooperative sector between 1976–1982.

The "State Budget, 1984" is dealt with in Vol. 15. The volume falls into three parts. The first comprises the public statement by István Hetényi, Minister of Finance. The second is the contribution to the parliamentary debate by Lajos Faluvégi, deputy prime minister and president of the National Planning Office. The third part comprises the justification for the 1984 budget and discusses the results to be expected from the 1983 state budget, the planned development of the Hungarian economy in 1984, and the major characteristics of the 1984 budget. The annex reviews in numerical detail the balance of the budget, its composition and structure, the composition of state revenues and expenditures and the distribution of the outlays of budgetary bodies (public expenditure), as well as the ratio of budget revenues and expenditures as percentages of GDP.

Volume 16 reviews the "Foreign exchange and customs regulations". It discusses in the first part what foreign exchange monopoly means, the bodies subject to regulation, the licences needed and how they should be applied for, foreign exchange accounts and exchange rates, as well as the regulations affecting enterprises and individuals. The second part begins by reviewing the Hungarian tariff system in general and then discusses customs procedures, customs clearance, customs duties, their payment and exemptions (reductions). The regulations are separately reviewed for residents and non-residents.

"Further development of the economic control and management system" is the title of Vol.

17. It briefly reviews the principles and results of the 1968 reform and then surveys the adjustments carried out between 1968 and 1984. Then it goes on to survey the guidelines for further development, which are characterized by the fact that they extend to all elements in the system. Certain changes are to be carried out over a longer period; some measures are linked to specific dates, while others require continuous implementation. Partial changes have already been introduced in 1984, while major changes affecting many components of the control system will have to be effected in 1985.

Volume 18 – in preparation – will review the Hungarian insurance system. A further volume in preparation will explain the technical terms used in public financing.

As can be seen, the series extends to a great many topics. This reflects the endeavour of the editors to provide broad up-to-date and exact information for foreign experts who are interested in the economic and financial problems of the Hungarian economy.

GY. KOVÁCS

BEREND, I. T.–RÁNKI, GY.: *The European periphery and industrialization: 1780–1914*. Akadémiai Kiadó, Budapest 1982. 180 p.

Iván T. Berend and György Ránki, two of Hungary's leading economic historians, have over the years collaborated on a number of books covering various aspects of European economic history. Several of them have been translated into English: *East-Central Europe in the 19th and 20th centuries* and *Underdevelopment and economic growth*. This present volume addresses themes, for example development in backward countries, dealt with in some detail in the previous two studies, but from a different perspective.

As the title suggests, the authors examine the problems of economic development during the "long nineteenth century" in the more slowly developing countries bordering the European core where the industrial revolution was born and first prospered. In contrast to the industrializing centre, composed of Britain, Belgium, Switzer-

land, France, Holland, and Germany, the countries of the periphery, Eastern Europe, the Mediterranean and Scandinavia, were much slower in taking up the flame of capitalist transformation. In the first half of the nineteenth century the differences in per capita GNP between the core and periphery continued to increase. Yet, by the end of the century, several of the peripheral countries had attained levels of development that rivaled those of the core, while other countries were well along the road of capitalist development. However, not all the countries of the periphery proved so successful, and many were still relatively underdeveloped at the outbreak of World War I.

The authors are concerned with two main questions: one, what were the motivating forces that led the countries of the periphery to change. Two, what was the impetus that finally set them on the road to industrialization. In answering these questions both internal levels of development as well as the effectiveness of the pull from the core are examined. Chapters are devoted to the socio-political prerequisites of change, the human factors of economic development and the role of the state on the one hand, while on the other, two chapters are concerned with the integration of the periphery into the world market and foreign trade.

What evolves from this approach is a European periphery quite disparate in character and development: "Successes and failures, partial successes and half-hearted tries gives us the variegated picture of the European periphery's development during the age of industrial revolution." What united these countries at the beginning of the century – their backwardness and traditional economic structure when compared with the core – ceased to exist by 1914. The great differences in their geographic position, historical development and social structure led to major changes, especially in the second half of the century. The beginning of the First World War found the Scandinavian countries on an equal level with, and an important member of, the industrialized centre. Hungary, Italy and, in part, Russia, had begun a serious economic transformation (before WWI cut it short). The third part of the periphery, the countries of Southern and South-Eastern Europe, had barely begun to

change and remained "bogged down" from the very beginning.

One of the better chapters is devoted to the role of the state in the period of capitalist transformation. The authors begin their discussion by citing B. Supple, who is concerned with two major areas of state activity: the state as the instrument removing the traditional feudal institutions and setting up the legal and institutional foundations for capitalism, thus establishing the "institutional" framework aiding growth; the state as an active participant in the economy, supporting economic activity which otherwise would not prosper, such as railways, canals, roads, etc., all necessary for the development of a modern economy. But in their discussion of the role of the state in the development of the peripheral economies, it becomes clear that the authors are not willing to limit themselves to this definition alone. They see the state's main economic role lying in the creation of the *preconditions* of the transformation, and they are quick to point out that "its role as a factor of industrialization, therefore, can by no means be seen as exhausted in its economic activities, but must be sought in the social, political, and ideological spheres as well." For example, the part played by the Russian state was determined not only by its political and economic activity, but also by its position as a great power. Whereas in the Balkans, where state intervention was on the whole ineffective, the preconditions for successful economic development were not present and for this reason state action "functioned in a vacuum." Thus the state was far from an omnipotent entity, and was limited by both the internal and external conditions with which it had to deal.

The role of the state in the economy is still a pertinent question, and it may be tempting to seek in this study answers to the pressing problems of today's North-South Dialogue, as the jacket-cover suggests. Certainly the countries of the 19th century European periphery faced many problems common to developing countries today. But, in this writer's opinion, and as the authors themselves warn, "it would be a great mistake to think of these relationships (among the peripheral countries and between them and the core) as comparable to those of the developed countries

of the twentieth century and the Third World."

If one is looking for contemporary significance, lessons to be learned from the past, perhaps this study sheds more light on the problems still facing the countries of the European periphery today, problems not of industrial development, but of modernization, increased productivity and integration into the world market. Many of the problems remain the same. For example, inadequate transportation and services still pose serious obstacles to further development. Also, and with no small relevance for Eastern Europe today, tremendous influxes of foreign capital alone are not prerequisites for successful development. Here much can be learned from the past, for, the authors state, as the last century drew to a close, the Balkan countries' pre-war debt was overwhelming and only Romania could avoid insolvency. Historical parallels are probably not as numerous as some historians may have their readers believe, but if economic planners and decision-makers could view the historical antecedents of their country's level of development (or lack thereof) more clearly — the task the authors have tried to address — than they might better be able to decide which direction their economies should move in the future.

All in all, this is a highly informative and well organized work, excellent for students of economic history and for economists who wish to obtain a necessary perspective on contemporary problems of underdevelopment and integration into the world market. The translation is first-rate and although there are a few printing errors, the publisher, Akadémiai Kiadó, should be thanked for producing such a handsome and readable volume. Finally, the text is fully documented and the footnotes are where they should be, at the bottom of the page.

D. YOUNG

FROWEN, S. F. (ed.): *Controlling industrial economics. (Essays in honour of Christopher Thomas Saunders.)* MacMillan Press, London 1983. 378. p.

This volume of essays was published under the auspices of the Vienna Institute for Comparative Economic Studies and it was edited in

honour of the 75th birthday of the British economist Christopher T. *Saunders*.

Professor Saunders began his career at various British universities, then he served the Government for more than ten years. In 1957, he became Director of the National Institute of Economic and Social Research where his research work concentrated on macroeconomic forecasts. As he became increasingly interested in world economy, in European problems and in East-West relations, in 1965 he accepted the post of Director of Research of the UN Economic Commission for Europe. He lived in Geneva till 1972 when he retired at the age of 65. He nevertheless continued his activities as UN Consultant in Geneva and New York, and as Professor at the University of Sussex. Since then he has taken a more active part in the work of the Vienna Institute for Comparative Economic Studies, closely cooperating in several fields with Professor *Levcik*, Director of the Institute.

The wide range of concern and extraordinary activity of Christopher T. Saunders are evident from the list of his publications given at the end of the volume.

The volume contains 16 studies grouped by the editor around four subjects.

Part One contains papers discussing structural changes of world economy. P. B. W. *Rayment* studies the impacts of "intra-industry" specialization on the foreign trade of advanced industrial countries. A. *Maizels* examines the industrialization of developing countries, L. H. *Dupriez* the theory of "long waves", and G. F. *Ray* the current and predictable problems concerning industrial raw materials. The last essay in *Part One* inquires whether demand or technological reasons are primarily responsible for technical progress in the chemical industry (C. *Freeman*, V. *Walsh*, and J. *Townsend*).

Part Two deals with some economic tensions between East and West. M. J. *Artis* studies relationships between full employment and capital efficiency while N. *Watts* discusses inflation in the Soviet Union and other socialist countries. This part is concluded with the presentation of Polish economic control in the 1970s and early 1980s (G. *Blazycza*).

The subsequent ones are macroeconomic studies. *Part Three* contains three studies on

problems of income distribution. L. *Needleman* analyzes the industrial wage structures of seven West European countries. The dispersion of incomes in CMEA countries and Austria is discussed by B. *Askenas* and F. *Levcik*. H. *Motamen* deals with problems, after the British example, which might torment advanced industrial countries because of oil revenues.

In *Part Four* concluding the book, attention is focused mainly on the stabilization policy of industrial societies. The failure of the British economic policy of the 1960s and 70s is discussed first by F. *Blackaby*. Fiscal policy is dealt with in two studies giving the analysis of the British and West German practices (by F. *Frowen* and P. *Arestis*, resp., N. *Kloten* and K. H. *Ketterer*). An international comparison made by P. *Arestis*, S. *Holly* and E. *Karakitsos* tries to find the characteristics of optimum stabilization. Last but not least, the study of G. D. N. *Worswick* scrutinizes the macroeconomic forecasting techniques used in the National Institute of Social and Economic Research (London).

In the framework of a brief review it is naturally not possible to discuss each essay in detail, nor even to underscore the most important statements. Therefore only references will be made to a few ideas at random.

"Intra-industry" trade alludes to international division of labour within definite industrial sectors. Namely, that the same items, like machine tools, are equally included in the export and import of two trading partners. Considering that such two-directional trade is in many respects inconsistent with the old theories of the international division of labour, several research workers are engaged in finding its reason. Also P. B. W. *Rayment* treats this problem in his study from which I should like to note two interesting ideas: First, the degree of "intra-industry" trade depends extremely strongly on the depth of statistical classification. Namely, as specialization is more and more refined it is more and more difficult to distinguish between industries.

Rayment's second inference is that international division of labour is of the widest range between countries with similar structures and growing "intra-industry" trade, consequently, plays a growing role between the advanced industrial countries by necessity.

The past, present and future of the demand and supply of industrial raw materials is the subject of the essay of G. F. Ray. The analysis backed up with a rich data base arrives at an optimistic final conclusion: with respect to this factor of production, we need not fear profound shortages in the foreseeable future. This naturally does not imply that there cannot be temporary and regional supply troubles or growing costs.

On the basis of the example of one sector, namely, the chemical industry, C. Freeman, V. Walsh and J. Townsend sought an answer to the old question: what the basic factor motivating technical progress is. On empirical grounds they arrive at the conclusion that neither the models of *Schumpeter* based on exclusively technological pressure nor *Schmookler's* model based on demand impacts alone are able to give a satisfactory answer. The authors deem it necessary to stress the importance of the coordinated but not always concerted policies of government, industry and the scientific sphere as a third factor.

The relationship between inflation and price policy is analyzed by N. Watts in connection with the Soviet Union and other East European countries. It is worth to quote the inferences made in the study about Hungary stating that the general rise in the price level might have been less if the Hungarian economic authorities had devalued the forint earlier, rather than engulfing the economy in a morass of special subsidies, taxes and controls from which it is difficult to extricate the economy without allowing the general price level to rise significantly. Nevertheless the author still considers Hungary to have one of the best controlled price policy.

What happened in the Polish economic control from 1970 till the strikes of August 1980? This is the subject of the study of G. Blazycy, in which he covers the following:

- contribution of the economic control agencies' activities to the economic crisis between 1970- and 1980,
- main lines of the Polish reform debate from August 1980 till December 1981,
- what socially acceptable economic policy is suitable to initiate the necessary structural transformations,
- likelihood of appearance of Polish economic problems in other socialist countries.

With respect to this latter question the essay explains its standpoint that an economic crisis of the Polish may be avoided in other socialist countries, i.e., the Polish events did not derive from the nature of the system.

B. Askenas and F. Levciuk analysed the dispersion of wages and incomes in some CMEA countries and Austria. The comparison suggests the interesting statement that, at least according to the trends of the mid-seventies, dispersion was more pronounced in several CMEA countries than in Austria.

F. Blackaby analyzes some major aspects of the British economic policy between 1960 and 1976, in a quest for the reasons of the lack of success of that policy. I should like to point out the inferences made by the author about industrial policy. The British industrial policy has till now not been able to state in what manner the steady decline of the international competitive policy of the British industry could be halted. Disagreements between the different parties, moreover, within parties, forced the industrial policy to frequent alterations. The changing idea about mergers is a good example. In the 1960s the economic policy encouraged mergers claiming that the British industrial firms were not large enough to compete effectively in world markets. In the early 1970, different tendencies predominated. It also appeared that many mergers had been financial exercises with no change in the size of actual plants. The view prevailing now is that medium-sized firms might well be the most efficient. Such an industrial policy is not appropriate to provide solution to the basic problems, the author states.

The last paper in the volume of G. D. N. Worswick is about the experience of twenty years of short-term forecasting at the National Institute of Social and Economic Research. On the basis of his experiences the author cautions against excessive optimism about the techniques applied; however, he also discards absolutely pessimistic opinions. Both business and government strongly depend on this activity of the Institute, yet, there still are problems that are methodologically questionable.

With the big variety and intellectual wealth of its essays the volume pays due tribute of respect to the already extremely colourful oeuvre of

Christopher T. Saunders and to his invaluable contribution to economics.

. B. BOTOS

ESTRIN, S.: *Self-management: economic theory and Yugoslav practice*. Cambridge University Press, Cambridge 1983. 266 p.

Economic systems based on self-management, i.e. systems where the labour force plays the role of entrepreneur, have a rich literature. However, findings of theoretical research have rarely been confronted with the experiences of Yugoslavia, the only country in the world, that has based its entire economic system on enterprise self-management. Saul Estrin's book contributes to the elimination of this gap.

While reading the book, it turns out soon why so few scholars have undertaken the task to confront theoretical models with Yugoslav practice. The author gives ample information about the difficulties in collecting and interpreting the necessary statistical data on Yugoslav firms. This is one of the reasons why he analysed Yugoslav practice from the 1950s only up to the mid-seventies with some reference only to developments after the major corrections in ideology, economic policy and practice around 1972/74. Another explanation for the scope of analysis is that market self-management theories may properly be tested only in the 1965–1972/74 period of the Yugoslav economy. Enterprise behaviour in the "Visible Hand" period, lasting from the beginning of the 1950-s up to the reform in 1965 cannot be regarded as a market-oriented system. However, analysis of enterprise behaviour in this period could give the necessary basis for comparison to that in years after 1965. After the market self-management era between 1965–1972/74 the role of market decreased significantly in the Yugoslav economy. Moreover, the disappearance of the category "enterprise" and the emergence of Basic Organisations of Associated Labour – self-managing units in most cases at workshop-level inside the previous enterprise – followed by desorienting modifications in statistical recording made it impossible to extend the scope of analysis beyond the period up to 1972/74.

Although the author, as a consequence of the above mentioned circumstances, focused his attention to developments in the period between 1965–1972/74, before going into details of interrelations between theory and Yugoslav practice he also points out the severe contradictions of this period cited as the "Golden Age" by some observers of Yugoslav development. The introduction of market mechanisms was inadequately prepared and never fully implemented. Thus, although prices had been entirely restructured in 1965, price controls began gradually to increase and distort the system again, until they covered some 70 percent of products by the late sixties. The goal of dinar convertibility on international money markets was never attained. In the newly created capital market ideology combined with inexperience generated severe allocation problems. The only permitted channels of capital flows were provided by the banking system, that became highly concentrated in some years. The number of banks declined from 220 in 1963 to 64 in 1970, moreover, the ten largest banks gave the great majority of investment credits and more than half of short term loans in 1968. Real interest rates were low or negative over the whole period, implying excess demand for funds thus forcing the banks to employ rationing procedures where political and regional interests proved to be stronger than economic criteria, leading to resource misallocations.

After thorough presentation of limitations for comparison of market self-management theories to Yugoslav practice even in the period characterised by considerable decision making autonomy of enterprises, the author gives a very detailed analysis of two particular fields especially significant for testing market self-management theories: the formation of industrial structure and the dispersion of earnings in industry.

Concerning industrial structure, statistical data show that Yugoslavia had – similar to neighbouring centrally planned economies – very few firms in 1958 and they were of a relatively large average size by the number of workers, as a consequence of the virtual absence of small enterprises. This markedly non-competitive industrial structure explains why a considerable proportion of markets at product level were monopolies or oligopolies. Virtually markets of

all heavy industries fell into this category and relative competitive markets with a significant number of firms were only found in some light industries such as wood, textiles and leather.

The picture presented here remained practically unchanged up to 1965. That means the reform started with a heritage that rather hindered than helped the introduction of market mechanisms and competition. After 1965 there was a relative decline over time from the initial very high measures of concentration, except in the most monopolistic and the most competitive sectors of the previous period. However, there was very little entry by entirely new firms and virtually no exit or liquidation, so their total number didn't change greatly over the period. The decline of concentration measured at different levels of aggregation was caused by the entry of existing firms into new markets. Though this statement cannot be verified directly because of insufficient statistical data, the increasing number of firms operating within each market parallel to the practically unchanged number of firms in total industry leaves no place for doubt.

The sector choice of the relatively few newly created firms does not appear to have been based on any market criteria. Mergers, another factor in changing the overall number of enterprises, played mostly the role of bankruptcy in Yugoslavia, where actual closures almost never occurred, indicated also by the few number of enterprise exits. Contrary to motivations in enterprise entries, mergers and exits, the above mentioned market diversification of existing firms took place by economic criteria, with the clear purpose to search higher average earnings, that significantly differed by sectors and industries. However, potential entrants failed to break into sectors of very high concentration and earnings, which refers to some effective barriers to enterprise entry into the most prosperous markets.

The author, based on his hypotheses presented in the first chapter of the book, assumed that self-management in the partially competitive Yugoslav economy, that is characterised by the absence of effective labour market forces just as any self-management system in theory, would have to create a significant dispersion in earnings by sectors, industries and enterprises. In con-

sequence, workers' incomes become enterprise-specific.

Empirical findings closely conform to expectations, with striking increases in earnings differentials around the time of reforms. The coefficient of variation of sectoral earnings increased by 50 percent, between 1956 and 1961, and by a further 50 percent, between 1965 and 1967, then slowly declined, ending in 1972 50 percent above the initial value in 1956. These data deviate to a great extent from experience of industrial societies. The coefficient of variation of earnings by sector for seven West-European countries never altered more than 1 percent, in any year over the period 1950–1960, with little change generally over the entire decade.

One cannot explain the rise in the dispersion of earnings over the period by changes in either the labour force composition or the skill distribution schedules between sectors. The value of correlation coefficient between the coefficient of variation for all groups of workers and for each particular one followed the movements of the aggregate for each skill type. Data on the inter-sectoral dispersion of earnings for particular jobs show the same picture, suggesting that e.g. an intersectoral ratio, on average, from top to bottom of 253 percent in the incomes of telephone operators could not emerge without some major institutional block to competitive forces in the labour market. Even on average workers theoretically could increase their earnings easier by shifting employment between sectors than by accumulating human capital.

The high dispersion of earnings cannot be associated with regional factors, either. The eight republics and autonomous provinces, except Slovenia, displayed at some time intersectoral income dispersion greater than for the country as a whole and each followed the national pattern over time in the same way that each skill group followed all skill groups taken together.

Analysing intrasectoral dispersion in earnings the author demonstrates that the dispersion in a given industrial sector was considerable after 1965. The income range within a sector reached more than 10:1 in several years, and generally exceeded 2:1 in most cases. This could not have arisen if the labour market had been operating freely.

The data on the changing ratio of urban to rural wages are also important, showing that workers in the industrial sectors were able to force up their incomes considerably after 1965, despite the large and growing excess supply of labour. Self-management theory provides a model of just such an institutionalised labour market imperfection.

The book, as a whole, convinces the reader that the application of formal models and empirical analysis parallel to each other may open new dimensions in economic research. They can provide interesting insights into the operation of the economy, and lead to the discovery of hitherto unrecognised elements of economic behaviour. For example, most Yugoslav analysts have stressed capital market imperfections as the main cause of allocative inefficiency but, as the book testifies, the Yugoslav economy can be well described by models of imperfectly competitive self-management, indicating a significant role for imperfections in the labour market as well. It explains

why policies based on correcting only capital market imperfections may prove to be inadequate. Estrin's study also points to the negative impact of monopoly power on resources allocation, a phenomenon that is rather rarely mentioned in the Yugoslav literature, perhaps for its sensitive political implications.

In his closing words the author warns his readers against drawing misleading inferences from the study about either the Yugoslav economy or self-management itself, pointing out that he could analyse here only some of the major elements of the Yugoslav economic system. Concerning self-management the author stresses the one-sidedness of his approach in this study, when omitting such vital parts of self-management as the alleged social benefits deriving from increased private motivation with a positive impact on productivity and commercial welfare.

S. RICHTER

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sous la direction de Jean MASINI

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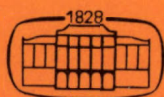
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ECONOMIC EFFICIENCY, CONTROL AND MANAGEMENT

L. FALUVÉGI

The author discusses the factors of an economic policy promising progress and, related to it, the program of further development of the economic control and management system. In the first phase those changes come into force which directly influence the financial conditions (motivation). The main features of these modifications are outlined in the article. In 1986 the regulatory instruments will be adjusted to the objectives and requirements of the 7th five-year plan and in 1987 a unified system of personal income taxation and the related modifications will be introduced.*

Conditions and chances of a dynamical development of the Hungarian economy

The attention of Hungarian economists is focussed nowadays on the chances as well as the external and domestic conditions of an economic policy aimed at founding a more dynamic development.

When trying to answer this question the bitter experiences of our adjustment to world economic changes may be regarded as one of the starting points. In the last two years we have even had the strength to reconsider our strategic social and economic objectives as well as their conditions, the main directions and alternatives of the development path in the framework of long-term planning. Further important facts are the conclusions drawn from the first phase of the elaboration of the Seventh Five-Year Plan (for 1986-1990) concerning some specific circumstances of the development of the Hungarian economy and its desirable and possible directions. The April, 1984 declaration by the Central Committee of the Hungarian Socialist Worker's Party** gives guidance of decisive importance also concerning the tasks related to the improvement of the economic control system and the social requirements raised towards development.

Looking back on the last few years it may be stated that the efforts to stabilize foreign economic equilibrium and to preserve international solvency have been successful. They prove that the main line of economic policy followed since 1979 has been correct—despite initial doubts and uncertainties—and has laid the ground for later

*Based on a lecture read at the meeting of the Hungarian Economic Association, Pécs, on the 6th of July, 1984.

**See *Acta Oeconomica*, Vol. 32. Nos 3-4. pp. 363-373.

development. Nonetheless, we are also aware of the fact that the necessarily continuous and rather considerable curbing of domestic consumption and the decrease of the rate of accumulation brought about dangerous disadvantages, too. Hungarian economic policy has to implement, therefore, a considerable shift in emphasis again. The desire for such changes is amplified by the justified social expectations to mitigate the tensions appearing in social services (benefits), in the relative incomes of certain trades and professions and in the effects of faster consumer price increases in recent years.

We have succeeded in realizing our most important economic policy objectives in recent years. One of the most precious has been a gradual reduction of the import surplus, amounting to almost 60 thousand million forints in 1978, despite deteriorating terms of trade in such a way that it may change into a considerable export surplus by 1984. We should not forget, however, that efficiency has not properly improved in the meantime and structural changes have been slow, although it has always been emphasized when defining our tasks that the curbing of domestic consumption and the forced changing of its internal proportions were factors in the re-establishment of equilibrium that would get exhausted in time. It is an elemental condition of further progress that production factors be much more efficiently utilized, and a flexible product pattern, much better adjusted to market demands, be developed. No favourable changes may be achieved in this field overnight. All this warns us that social expectations alone – however justified they may be – do not create the conditions for a more dynamic development.

The international obligations of the country may be fulfilled and domestic supply improved only if our entire management concept is changed and modernized. This is a precondition for that the income-producing ability of the economy becomes stronger and the foundations are laid for a lasting faster growth. It follows that *the acceleration of structural changes should be ranked first within the system of goals of economic policy in the longer period to come so as to accelerate structural changes and achieve an improvement in efficiency, of course with the strict requirement in view that foreign economic and domestic equilibrium should be simultaneously further consolidated*. The improvement of efficiency has been at the centre of economic policy also up to now, but during the last years this requirement had several times to be subordinated to that of preserving international solvency. Besides, we have not really faced the social consequences of structural transformation, of greater income differentials and shifts in income into consideration and have not always undertaken to deal with the concomitant conflicts.

What are the chances for the implementation of an economic policy promising some solution? It would be obvious to answer that in an economy sensitive to foreign trade, like that of Hungary, a stimulation for faster growth could be expected from the world economic boom with good reason. However, in those West-European developed countries Hungary has more extensive economic relations with, economic growth is likely to become faster only to a lesser extent and, according to some forecasts, even this faster growth will only be temporary. Market competition is becoming even sharper, raising ever hardening qualitative requirements towards Hungarian enterprises, and increasing price

competition, too. The exploitation of possibilities resulting from the boom is even more difficult for Hungary because the carriers of this boom are precisely those new, most up-to-date products whose share is relatively low in the Hungarian production structure. Out of the developing countries those of the Far-East are likely to be characterized by economic dynamism also further on. However, Hungary has no traditions in cooperation with them and this fact strongly delimits the scope of foreign trade possibilities for the time being. Many of the developing countries maintaining closer relations with us are likely to have continued payment difficulties, on. On the basis of international forecasts there will thus be no radical changes in world trade conditions for Hungary, until the end of the decade, in other words, we should be prepared for a tough struggle.

Though membership in international monetary organizations has widened Hungary's possibilities and favourable experiences have already been obtained, yet, in international credits may only be raised on very hard terms. According to forecasts on the international monetary situation a palpable extension of possibilities for raising medium- and long-term credits, or a considerable reduction of interest rates may not be realistically reckoned with. It remains, therefore, a primary requirement for Hungary to continue to decrease the debt stock in the years to come.

An unchanged determinant factor of Hungary's economic development is her cooperation with CMEA-countries. Our endeavour to widen our relations, to reveal new possibilities and utilize them in a mutually advantageous way coincides with the ever stronger recognition in CMEA-countries that an overall extension and deepening of cooperation as well as improvement of the system of economic conditions are the common interest of all those concerned. This was emphasized at the 1984 summit meeting of CMEA-countries stressing the need for further development of cooperation based on mutual interest, and the coordination of its long-term trends. Intensive development raises higher requirements toward the economy of each member-country. Under their impact, the role of the CMEA may become more important in the longer run again, just as it had been in the more dynamic growth of Hungarian economy during a longer period in the past. At present we have to reckon with the fact that though the rate of growth will become faster in several socialist countries, yet our imports of energy and materials may not at all or only hardly be increased, while exports will more and more absorb only such Hungarian products that are more valuable and up-to-date for our partners.

Taking all expected external circumstances into consideration the conclusion has to be drawn *that though no major income-stimulating effects may be reckoned with from external conditions, yet the latter will give a somewhat more extensive room for manoeuvring to economic policy than at present.* This scope of movement may be widened to the extent we shall be able to join world-wide trends of faster economic development, mainly as regards the structure, up-to-dateness and quality of exports.

Chances for a positive turn are strengthened by the fact that Hungary has achieved a surplus in the balance of trade settled in convertible currency owing to efforts in recent years—in spite of deteriorating foreign economic conditions—which allowed a reduction

of her debt stock. The equilibrium situation should be further consolidated also in the years to come, but for this the size of export surplus need not be increased at a similar rate. Therefore, import conditions will become more favourable: *to the extent we can increase exports also imports may be increased, what is more, even to a little larger extent.* Another circumstance promoting development is that the extensive investment restrictions of recent years may already somewhat be mitigated. Then, a more considerable development of competitive production may gradually be started and the purchase of up-to-date technology may be increased to some extent. The most important precondition of this is that the export capacity of the Hungarian economy improves step by step.

This chance may only be exploited with a better quality of domestic labour and through a greater performance of enterprises, and an increasing income-producing ability of the entire national economy. If no gradual, yet definite progress can be made in this respect, the Hungarian economy will function with an unavoidably deteriorating efficiency. In a qualitatively and structurally changing world economic environment the loss of a previously good position becomes a real danger, meaning that we are lagging behind world-wide trends of technological development and this would result in a decrease of incomes to be distributed at home. That is why efficiency should be placed now in the focus of planning and management.

With a view to that, first of all technological progress should be accelerated; up-to-date technologies promoting the economical use of energy and materials should be developed and widely applied just as microelectronics, automation, robot technology and biotechniques. It should be achieved in the longer run that the specific energy consumption decreases and production increases much faster than material consumption. Our endeavour for the next plan-period is that a 1 percent increase of net national product should be accompanied by an at most 0.4 percent increase in energy consumption. The share of secondary materials within the total material consumption of the industry should be increased from the present about 4 percent to 7–8 percent; this would already mean materials in a value of 40 thousand million forints p.a. This is a realistic endeavour since—thanks to elaborated programmes and actions—specific (per unit) energy and material consumption has considerably diminished in recent years and a modernization process of technologies also started. It is an important requirement furthermore that scientific research, and research and development activity in general, should be better adapted to requirements of technological development and their results be more rapidly utilized in production.

Another key-issue of a more efficient utilization of production factors is the relationship between labour productivity and full employment. There are debates in this field, but our starting point can only be the fact that the level of productivity of Hungarian industry is only about half of the West-European one. True, this statement does not uniformly hold for all branches and enterprises, but there are also cases, where backwardness is even greater. It is especially thought-provoking how much productivity lags even behind the otherwise often criticized technological level in several industries.

For the improvement of international competitiveness labour productivity ought to be increased to an extent that its rate exceeds the growth rate of production in productive branches, first of all in the (manufacturing) industry. In the second half of the 1980s a 4 percent production increase should be accompanied by a 6–7 percent one of productivity. This can be achieved; let us only think of the well-known deficiencies of production and work organization. However, productivity standards approaching the international level may not be achieved simply by improving production and work organization. It is of primary importance here that the technological equipment of labour be improved and the existing stock of fixed capital be made more up-to-date and better utilized.

In order to increase efficiency *the production structure ought to be transformed and overall modernized*. This should include, beside development, also reductions. Key-fields for selective economic development adjusted to our particularities are sought nowadays in Hungarian economic policy, national economic planning and in economic literature as well. There is a general consensus that if we wish to accelerate the transformation of the production structure, then first of all the product pattern should be modified and smaller investments—modernizing existing capacities and improving the quality of products—as well as technologies saving labour, material, energy and preserving the environment should be given emphasis. Economic control and management should create a more favourable economic environment for such type of enterprise development concepts and more vigorously stimulate these concepts with economic tools.

To be able to accelerate structural transformation we must at last break through the wall towering in front of endeavours aimed at the elimination of inefficient, loss-making production. Though this is practically an enterprise task, a change in the style of government work is also needed for progress. The principles judged correct by everyone may only be realized if government does not take up economic losses, but only supports really promising initiatives. This resolution is verified by the growing recognition that a high price must be paid if necessary steps are not taken in due time.

For the raising of efficiency it is indispensable that the industrial product pattern be better adjusted to market demand and the development of such manufacturing branches be accelerated which powerfully further the modernization of the entire industry. According to our present knowledge such branches might be, for example, the manufacturing of pharmaceutical products and pesticides, most advanced machine tools, telecommunication and microelectronic products, medical instruments, road vehicles and their sub-assemblies as well as of agricultural and food industry machines. In agriculture we should strive for raising the degree of processing of products—maintaining the dynamics of development in the production of major agricultural articles—and produce first of all processed goods that sell profitably.

In order to create proper conditions for an economic policy resulting in some solution our advantageous possibilities inherent in the international division of labour should be better exploited. For this we should achieve that *the development and modernization of production be concentrated on exports*. Only if exports can be rapidly

increased can we buy the import products required in ever larger quantities for production, technological development and the supply of the population. If we wish to maintain foreign economic equilibrium, then, parallel to export-orientation, also a rational and economical import-substitution should be striven after. The two most important sectors—industry and agriculture—should increasingly turn to each other's demands and stimulate each other for growth. For example, with the development of some up-to-date agricultural machines and of the production of industrial raw materials of agricultural origin considerable foreign exchange expenses, 100–120 million dollars yearly, could be saved—if barriers to partial stimulation were eliminated and thus more were allocated to the purchase of up-to-date technologies.

Infrastructure is becoming more and more important among conditions of the viability of the economy. The disequilibrium between material production taken in a narrow sense and infrastructure—services—may only be reestablished if the efficiency of production improves more rapidly and is better adjusted to requirements. Though it will hardly be possible to increase the share of investment into productive infrastructure in the nearest future, nevertheless certain fields (e.g. telecommunication, the railway network, protection of water quality) should be developed and modernized more rapidly than productive branches. The existing lag in non-productive infrastructural investment may be decreased to a greater extent where also rather considerable contributions by the population and enterprises may be reckoned with, and tools of a continuous maintenance may be safely ensured.

Summarizing—and somewhat simplifying—the above, we may say that there is a chance that foreign economic conditions will not deteriorate or only to a slight extent and in this case Hungary's field of manoeuvring will unambiguously depend on changing and dynamizing domestic factors. *A development may only take place when and only to the extent that its conditions can be created in economic work at home.* Adjustment to the world economy and how much we may make use of the possibilities provided by it also depend on this. It may be seen that economic growth may not be based on the drawing in of external resources. Therefore, general economic standards should be raised in the years to come. The primary task is to improve the qualitative factors of development, since any quantitative growth may only be achieved if this is observed. The decline of domestic consumption may only be stopped and the growth of the economy accelerated within a few years by more successful work and with more profitably realizable products.

Considering chances and circumstances we have come to the conclusion that the right solution is to divide our tasks in national economic planning into two stages—the next two-three years and the years between 1988 and 1990, respectively. This is expedient because economic conditions to be expected in the first years may be better surveyed. At present it seems that in the first stage attention must still be paid first of all to the lasting stabilization of equilibrium relations—with economic tools. In this period the stabilization of external equilibrium will absorb a considerable part of the increment of national income. Domestic purchasing power may, therefore, only be increased to a

modest extent, which, again, only allows a slight animation of economic activity. In the second stage, however,—if no more deterioration will take place in external circumstances and if we change a lot in management—the increment of economic resources may already be spent on the extension of domestic consumption to a greater extent, and thus purchasing power, too, may increase to a palpably larger extent.

Prepared for several conceivable variants in the development of external and domestic political and economic conditions we started to outline the possibilities of economic development by elaborating several variants of equal rank—introducing various characteristic growth paths—in national economic planning. The more favourable variants have been based on the assumption that external circumstances will develop relatively favourably and domestic economic activity will meet the new requirements of the intensive stage, i.e. it will be more successful and profitable. In this case industrial production would grow by 2–4, agricultural production by 2.5–3.5, exports by 3.5–4 and imports by 3–5 percent, on annual average; the growth of the net national product may reach first 2–3, then about 3 percent yearly or even more and in this way the possibilities of distribution policy might improve as well.

For the sake of completeness it should be mentioned, however, that the conditions for such development could not be fully founded as yet. Therefore, for the time being, we also reckon with such a variant where the process of stabilization of external economic equilibrium will reach even into the last years of the decade, either because external circumstances develop unfavourably or because our domestic work does not properly improve, and thus conditions of an economic policy founding a balanced, efficient and adequately fast economic growth would not be established. Of course, we try to avoid this situation.

Comprehensive development of the system of economic control and management

Since the development of Hungarian economy is largely determined by the domestic circumstances and the efficiency of our own work, the role of *economic control and management* especially increased, and so has the responsibility of those holding leading posts in economic life, for the improvement of the performances of the national economy for the realization of our long-term social and economic objectives. Confirming this, the Central Committee of the HSWP took a stand in favour of a comprehensive development of the system of economic control and management in April, 1984. In its realization experiences of the one and a half decades passed since the introduction of the 1968 reform are a valuable intellectual basis and provide guidelines of practical value. I would like to point out three lessons.

Firstly, the 1968 reform scheduled the major changes practically for a single day. It was expected that in the course of practical operation such questions would be arranged as, for example, the role of import competition, the cooperation mechanism of

CMEA-countries or of greater differences in enterprise management and profitability. However, everyday life raised more problems than had been expected. Their solution was also impeded by the fact that for years no economic policy programmes aimed at continuing the reform had been elaborated. At present we already do know that the lack of a concept on further development, our being unprepared for social effects and consequences, postponement of structural changes as well as deterioration in foreign economic conditions had led to a situation that the system of requirements in regard of qualitative changes in management remained of lower standards than what would have been desirable in the 1970s.

This is why the forces urging for efficiency and economic movement were weak. This danger exists even at present. If only the regulation will be perceptibly modified, while changes in other elements of management will only later or not at all take place, then it may occur again that stimulation for progress will not be strong and consistent enough.

The second lesson is that deviating chances for adjustment to market conditions were not properly taken into consideration, that is, that chances to obtain better position were not equal. In retrospect, we may state that oversize subsidies and brakes had been built into the system of regulators in order to mitigate differentiation. This is why, it could occur,—and even frequently,—that enterprises with higher management standards could not get into a better situation in technological development or wages paid as compared to the income produced by them or were precisely in a disadvantageous situation as against enterprises with average or low management standards and disposing of large reserves. This lesson should be given special attention, because the same danger still exists. It is obvious that endeavours at avoiding economic pressure should be reckoned with also in the period to come. However, we should by no means give way to them in the future.

The third lesson is that in the development of the system of economic control and management greater attention should be paid in the future to the *social environment and effects*. The measures taken in economic management affect, namely, wide social groups and sections and directly affect the general feeling and mood of the population. Thus, they may considerably influence the social, political and economic activities of the people. From this viewpoint special attention should be paid to the relationship between differentiation of income and wealth and performances as well as their social and collective publicity. But, the possibility of alternative ways of social rise, the fate of loss-making enterprises and the connected development of employment or a social policy capable of moderating the negative effects of a more powerful differentiation and a greater economic mobility are similarly delicate questions.

Considering the lessons from the introduction of the reform and the period passed since then we are elaborating such a programme now—covering all fundamental elements of the system of economic control and management—where the realization of each partial period will last several years. In the first step, in 1985 those changes will come into force which directly affect stimulation and which are primarily expected to improve performances. For example, the system of income and earnings regulation will change.

First of all the system of producer prices in the competitive sector will be made up-to-date, together with economic calculation. New forms of enterprise management will appear. In the framework of especially in manufacturing, trade and market creation, building industry—the organizational system will change and the further development of the banking system will begin.

In 1986 the measures of regulators will be adjusted to objectives and requirements of the 7th Five-Year Plan, the establishment of a market price system will be continued, relying on economic calculation intra-enterprise incentives transmitting market effects will be created, a modernized system of (local) council and institutional management will be introduced as well as the system of incentives increasing enterprise wealth will be elaborated for collectives, workers and managers. In the third step—presumably in 1978—we should like to introduce a uniform system of personal income taxation, to carry out related modifications in the wages system and social policy benefits, as well as to further develop the system of normative turnover taxes operating with a few tax rates. At the same time, the banking system would be further modernized and the process and institutional system of reconciling interests completed.

Therefore, the further development of economic management is a well schedulable, multi-step process as it is indicated by the declaration by the Central Committee of the HSWP and also by the guidelines of the Council of Ministers. The main reason for graduality is that *the economic situation is much more difficult at present than it had been in the late-1960s*. Owing to this circumstance all relevant changes to be attained are concomitant with a rearrangement of capital, incomes and positions. If we intended to carry out all these changes at once, it might be feared that also conflicts difficult to handle would arise. This is why a “preparation time” should be left for adjustment to greater requirements. Of course, this must not weaken the strict consistency of implementation and in this field we should act in a manner different from earlier practice. We set the general objective that the improved system of economic control and management should be already fully enforced in the second part of the 7th Five-Year Plan-period (1986–1990).

1985 is considered as the first and most important year for further development. Preparation for changes of the next year are still in process, at this place, therefore, I can only speak about the goals and effects to be attained, about the problem as well as about possible ways of changes.

Development of the market mechanism and of organization

The 1968 reform considered an organic connection between the plan and a regulated market as the basic issue of the system of economic control and management. Experience of the fifteen years passed indicates that only a slower progress could be achieved in the enforcement of market relations than what had been expected. It is a

permanently returning question whether, in our domestic and foreign economic situation, it is realistic at all to develop market relations and the concomitant competition? There are also other justified questions. Have not we overestimated the role of the price mechanism? Have not we underestimated foreign economic conditions or the balancing role of a planned and strict control of purchasing power? Have not we lagged behind in market creation? Have not we been inconsistent as regards the government's market surveillance?

There are thus theoretical and practical questions to be answered. These pending questions and deviating views must, however, not lead to some expectant or defensive attitude forgetting about the basic requirement of the reform. In this way we would, namely, weaken previous achievements of the reform of economic control and management and unavoidably face a confrontation between economic control and the requirements of intensive development.

The aforementioned questions may not be answered simply by yes or no; therefore, I am going to deal with four subjects on the basis of our development intentions, namely, new concepts on market creation and surveillance, organizational changes and the development of the price mechanism.

As regards market creation not everything should be started anew. There exists competition in Hungary even at present, for example in the trade in certain industrial consumer goods and agricultural products, but also between sectors, among small ventures, what is more, to a modest extent even in the building industry. Through their exports enterprises are directly faced with competition on external markets. Economic organizations may get into competitive position also in such a way that rivals are just appearing which weakens previous monopolistic situations, immediately threatening with loosing a part of customers. At the same time, one of the most serious obstacles to the development of market effects is at present, yet, that foreign economic equilibrium is given priority, thus limiting the possibility of import competition, eventually even eliminating it.

An important method of the animation of competition and the development of market relations is a deliberate market creating activity of the state. This implies first of all the development of a market order and forms furthering rational economic competition as well as the establishment of organizational frameworks of management which help in shortening the way of commodities and reducing costs, thus strengthening general equilibrium between demand and supply. The most important task in the market-creating activity of government is to bring about conditions for enterprising, that is, to make possible the free combination and flow of resources on the basis of profitability and profit motivation. In the framework of the programme of market-creation envisaged for several years the goal has been set to bring about the organizational and other conditions required for the development of the market in the major part of manufacturing, especially in industries producing consumer goods, in home trade, the building industry and in services for the population as soon as possible. The breaking up of organizational frameworks impeding competition as well as the widening of

possibilities of cooperation, thus improving the relations between demand and supply do all belong to the tasks to be solved.

Economic control paid attention to market surveillance also previously, what is more,—in the opinion of several specialists—an even too great attention to influencing the market. A more efficient and better organized market surveillance than the contemporary one should function within appropriate legal frameworks and in a controllable way. When changing its institutional and organizational order and tools the starting point is that supply is a responsibility of the entire government, thus so is market surveillance as well. It is an important objective of the state to promote the development of market relations and smooth market processes, but, should serious turnover disturbances arise, it has to make use eventually even of coercive—intervention—tools. Its primary task is, however, to control and ensure undisturbed and fair economic competition and economic relations, in general, as well as to have the related legal rules observed. By its nature, market surveillance is first of all not a sectoral, but an intersectoral task. This must come to expression in the course of its further development, both in the formulation of tasks, functions and in the division of labour, taking into consideration the particularities of various activities.

As regards the tools of market surveillance, one of the most delicate questions is when and how instructions should be given. Misunderstandings just as well as justified or unjustified worries arise most frequently in connection with this aspect. Direct instructions will always remain a part of our control system, in a narrow sphere. However, the number of such instructions has multiplied in recent years and we have been forced to apply also other administrative instruments, else we could not have preserved our solvency. With easier external conditions also the agencies of market surveillance may get rid of individual instructions and of being forced to interfere with enterprise management in this way.

We should like to achieve that such enterprise structure be created in the years to come where well functioning big and medium-sized enterprises adjusting to market changes may live and work together with flexible small organizations. For structural transformation government measures will also be needed, but the real way of progress is—and seems to be also more successful in the longer run—that enterprise management itself should recognize the need and rationality of structural transformation and initiate the establishment of an organization most suitable for the given circumstances.

Structural transformation required for improving market relations will be promoted, already from 1985 on, by the fact that constraints on production line still existing in the competitive sphere will be eliminated and new types (forms) of enterprise management will be developed. Such will be the enterprise council or the enterprise controlled by an elected management. Accordingly, the relationship between agencies of economic control and management and the enterprises will be transformed, rules of enterprise foundation and reorganization modernized and various banking and other institutions for the flow of capital among enterprises will be developed. When we emphasize the many-sidedness of our measures here, we think of the international

experience according to which a decentralization of the banking system alone would not yet create the conditions for a rational flow of social capital. For this several other circumstances are also required.

It is a particularly important—but, as we have seen, not an exclusive—element of the strengthening of competitive relations that the price system is being developed in the direction of real competitive prices. Prices may in this way become real, objective measures of efficiency and thus influence the profitability and tax-bearing capacity of enterprises, while through their effects on earnings they influence the attractiveness and growth path of enterprises.

When considering the problem in a somewhat simplified manner, there are two contradictory, nevertheless interrelated tasks to be solved in connection with the system of producer prices. On the one hand, enterprises should be made interested as much as possible in accommodating themselves to customer demands and this refers to entrepreneurs in general, too. It is obvious that this is only possible if "it pays" for them and they can be profitable on the market. There is no interestedness on the part of producers without appropriate prices! On the other hand, the fact should be taken into consideration, too, that in Hungary a sellers' market is still dominating. The lack of appropriate supply allows in certain cases even such price increases which are not justified by the technological standards and quality of products. Therefore, the development of the system of producer prices in the direction of competitive prices is only justified where and to the extent that competition impedes price increasing endeavours resulting from monopolistic situation and shortage.

The principles of producer price formation were determined in Hungary in the last years. By forming competitive prices we strive after eliminating the so-called double barrier, that of export prices and export profitability, respectively, in a wider sphere. In fields connected with international trade domestic producer prices could move between export and import prices; the latter would also include rational customs duties.

In a part of manufacturing, where competitive price is applied, constraints on price formation are not or only partly enforced even at present. Their elimination was attached to stimulation for boosting profitable exports. One could argue whether this is the most expedient solution for developing a system of really competitive prices or something else. In our opinion the conditions could be ensured for enforcing the new rules of competitive price formation in a wider sphere in 1985. Our endeavour in the longer run is to restrict the prevailing constraints on price formation in the field of producer prices as much as possible.

When trying to make the price system and price mechanism more flexible we do reckon with a well-considered, solid price policy of the enterprises. If, for example, they react on the increase in taxes linked to production factors by raising prices instead of improving their efficiency, then no progress can be achieved. We hope that enterprises will make use of—but not abuse—the wider possibilities offered to them. There is a general consensus that inflation must not be let run away. In order to have prices as real measuring rods, we *should proceed on the way towards the elimination and reduction of*

subsidies. This, however, will be an advantage only if it does not stimulate inflation and subsidies will not automatically be replaced by higher prices, but the major part of previous subsidies will be compensated by an improvement of efficiency.

The creation of real market relations requires not only that organizational and regulatory tasks be solved, but this should also be accompanied by realistic conditions of economic activity, equilibrium and greater exportability enabling the increase of imports. The lesson should be properly learnt: market creation brings about the conditions for the elimination of a part of constraints which again will allow a further development of the market. However, it is also sure that all this may only take place on the basis of harmony between value and real processes, for which guidelines are provided by national economic plans.

How to modernize the system of enterprise income regulation?

How can it be achieved that the system of enterprise income regulation better furthers and strengthens efficiency, structural transformation and entrepreneurship?

In 1968 the breaking down of the central state plan to enterprises was eliminated in Hungary, but with this the financial conditions of independent enterprise management were not fully ensured yet. The control of enterprise economic activities became based on the regulation of separated financial limits. Wages were separately regulated, too. This constraint impeded economic organizations in realizing the most expedient combination of various production factors and converting them according to price and profitability relations prevailing at any time. In this way a contradictory situation was created where the "hardest" forint (i.e. the one most difficult to create) was that of the increment of average wages, while the "softest" one (i.e. the most easy to cover) that of other costs. *It is an elemental condition of entrepreneurial economic activity that differences in the value of the "various" forints, their "earmarking", should be eliminated or at least strongly diminished as soon as possible.*

Up to now the interest in profit has meant that any financial (money) fund could only be increased if profits became larger, too. However, enterprises have strongly been limited in the discretionary utilization of their incomes. In the future we wish to eliminate this barrier to the profit motive or at least mitigate it by *reducing the number of funds, making transfer into each other easier and by linking earnings practically to the tax-bearing capacity.*

Taxes or withdrawals directly imposed on profits as well as the barely existing relationship between profits and the increment of various funds made economic organizations almost indifferent to the development of costs. In addition to this, the saving—but also wasting—of wage costs had an almost negligible effect on profits. With the modification of income regulation we wish to increase the sensitivity of enterprises to costs, both in a positive and a negative sense.

Profit motivation was also weakened by the fact, that enterprises had been stimulated—often forced—beside profits for more and more and varying goals, as e.g. the increase of exports and saving of imports. We wish to simplify this multi-purpose character and the complicatedness of regulation. If the system of economic control and management will be capable of stimulating for the really most important few goals, it may be then achieved that *these endeavours be transmitted to the enterprises through price and costs relations*.

With all this in view we wish to modify the taxation system. This modification is necessary all the more as in past years firms displaying a successful economic activity carried disproportionately large burdens in Hungary, thus protecting the inefficient ones. In the future we wish to raise possibly the same requirements towards all participants of economic life, though this may not be achieved at once, but only gradually.

The structure of taxes, and the relative proportions of various channels of income centralization will be changed in such a way that taxes proportionate to profits will be decreased. It is envisaged that a part of taxes on profits and of withdrawals affecting enterprise funds will be changed into withdrawals proportionate to resources, partly to wages and partly to assets (capital). In the longer run it is also justified that a greater part of the withdrawal of incomes be "transferred" to the stage of final realization (sales).

Through this we wish to attribute a greater importance to the turnover (sales) tax which, again, allows to reduce taxes on profits. In this way the interest of economic organizations in profits and their sensitivity to costs will increase. Economic management can thus better influence enterprises in selecting a rational combination of production factors and, not least, centralized incomes may also be planned with greater safety.

The realization of these requirements, or rather intentions, is not an easy task. Namely, the aforementioned transformation ought to be carried out in such a way that the share of centralized incomes (in total income) should not decrease in the meantime; this latter is important not because of budgetary, but of foreign economic equilibrium. On the other hand, we also see that various withdrawals—imposed on development funds—introduced with temporary character during the last years, should be eliminated as soon as possible. We should not prepare for drawing away a part of development funds yearly, much less in the course of a given year.

As regards the joint handling of principles and this practical dilemma the following statement was formulated by the State Planning Commission:

1. *Enterprise burdens linked to the utilization of live labour will be increased* in such a way that either the social insurance contribution or the wage tax will be raised and the system of communal (urban and village) contributions will be changed. The latter, proportionate to profits at present, would be changed into withdrawals proportionate to wages. Burdens on live labour are increased in order to make enterprises feel that costs of the social reproduction of labour have increased recently and this should be expressed in labour management as well as in the selection of technologies and product patterns, too. No decision has been taken as yet whether the system of urban and village contributions will be changed in 1985 or 1986.

2. It has been envisaged that the *centralization of depreciation* allowance will be gradually diminished and ended. Discussions on the rate of this process are still going on. Our idea is that half of the present withdrawal will be eliminated in 1985 and by 1986 it will fully disappear. With this an important step could be made towards improving the management of assets in harmony with conditions of entrepreneurship and so that the institution of depreciation aimed at promoting technological progress could really function. This change will be an important element in the investment policy of enterprises bent on modernization. Our intention is that bank credits should also promote first of all such investments.

3. Our intention is to *eliminate the complicated, multi-channel taxation of development (investment) purchasing power*. On the other hand, however, investment purchasing power would much increase as a result of modifications outlined above which, again, is not permissible for equilibrium reasons. It is envisaged, therefore, that a small, 2 percent tax—to be paid on the basis of enterprise assets from profits—will be introduced in order to control investment purchasing power. This—as a returns requirement on one of the resources—would remain a permanent element of the system of income regulation. This property tax would simultaneously create a cover for centrally controlled structural transformations and stimulate capital flows among enterprises, too.

Various computations have been made concerning the expected effects of the aforementioned changes rearranging incomes and commitments. Such computations were made by both functional and sectoral ministries, but also by individual enterprises. The character of these changes is such that the more aggregated the level at which the national economy is examined, the smaller the income-rearranging effect will be. No rearrangement would take place among major income holders—e.g. the budget, enterprises, the population—while it would only be of a small extent among national economic sectors. Incomes would, however, be rather significantly rearranged among branches and the extent of such rearrangement would be even greater among economic units. Final decisions will rely on the analysis of these effects, and not only non-recurrent rearrangements, but also the effects on continuous transformations will be weighed up. Efforts will be made that more efficient economic organizations do get into a better situation through these measures and a more rational management with production factors be furthered.

In the course of preparatory work opinions are often voiced that enterprises must not be exposed to such rearrangements from one day to another. These opinions usually come precisely from those who mostly had the possibility during the last fifteen years to avoid the effects of normative regulation and the market. We wish to allow this less and less even if we know that it is difficult to explain to economic units why *normative taxation means the same requirement as meeting market demands*. Namely, these two things cannot be separated from each other, since tax-bearing capacity depends on profits. And, a normative tax system expresses the requirement that everybody has to contribute to the covering of common social expenditures more or less according to the

same standards. This concept may best strengthen our objective that motivation through interests should hold for the longer run and be aimed at the continuous augmentation of the entire material and intellectual capital of economic organizations.

New regulation of wages and earnings

It is perhaps the new regulation of wages and earnings that is awaited with the most of expectations and is also connected perhaps with the most of illusions. In Hungary it is known already that this is an important factors of the regulatory system, but it can only be efficient together with other elements: price and income regulation, material and organizational conditions of continuous production etc., if all these are coordinated.

In the course of elaborating the new concepts it has become unambiguous that changes should be focussed on interest in a more efficient utilization of live labour and this is that should be strengthened. This may only be achieved if the present role of wage regulations is diminished first of all in restricting the outflow of purchasing power. Therefore, the system of earnings regulation had to be revised also from the viewpoint how it could be achieved that enterprises pay wages to their workers and employees only if such earnings are covered by realized national income in adequate proportion, that is, that wages without adequate coverage should not flow out.

It has become clear as well that the entire economic sphere may not be regarded as uniform from the viewpoint of regulating earnings, and thus, several forms should be simultaneously operated. Distinction ought to be made according to the possibility of enforcing the profit motive and in consideration of the objective conditions for adjustment to market relations. Where adequate conditions exist, the *level of earnings* should be regulated, while where they only partly exist, an updated regulation of incremental earnings should be applied. I should like to note that even this latter one is more stimulative than the now prevailing system, because the increase in performance may be better recognized than at present.

The substance of earnings level regulation may be summarized as follows:

1. A tax should be paid by enterprises after the total amount of earnings, the regulation is not based on the taxation of increments as at present. Thus the distorting effect of so-called bases (the wage level or total amount of wages in the preceding year) may be eliminated and practically also the negative effect of the average wage regulation, stimulating for increasing the staff with people having lower salaries, may disappear.
2. Taxation would not distinguish between various components of earnings, e.g. basic wage, various premia and profit share.
3. The basis of assessment of taxes to be paid by enterprises would be the sum total of yearly earnings by individual and not the increment of average earnings within the enterprise. Enterprises will have to pay less tax after smaller earnings and more tax after higher earnings. The tax would be differentiated according to size of earnings. Thus the

overall efficiency requirement could be expressed that more income should only be allocated to those whose performance is better and who can offer greater performance.

4. The attainable total earnings and increments of earnings would depend after all on how much tax the enterprise can pay from its profits. Tax burdens would be mitigated if either earnings or the number of staff diminished. Since, according to experience, the level of earnings and, within them, of wages is very rigid, enterprises could be made interested in reducing their staff through the taxation system by an appropriate "calibration" of tax rates.

This regulation would allow to increase earnings by about 300 forints after 1000 forints of costs saved, as against the present 40–50 forints. This is a considerable change! It is expected to enhance interest in saving non-wage costs, and thus to improve profitability and—after all—tax-bearing capacity. We think that these measures will also allow a fairer remuneration for work performed during official worktime. This more powerful stimulation involves the risk that enterprises try to attain higher profits not by reducing their costs but by raising prices. Therefore, the system of earnings regulation is closely linked to the improvement of the price system and this latter—as already mentioned—to the development of market relations.

This form of regulation is practically a further development of experiments started in the industry and building industry in Hungary in 1983 and is very similar to the experimental wage regulation called "earnings level regulation of large-scale farms" in agriculture. In 1984 54 enterprises participate in this form involving about 240 thousand employees. This is about 10 percent of all employees working outside agriculture, personal and housing services and the financial institutions. Experimental regulation focussing on wage-increment is being applied at present, by 72 enterprises with about 130 thousand employees; their share within the above sphere is 6 percent.

We think that, computed on the basis of the number of employees, at least one third of all enterprises may be drawn into the scope of regulating the earnings level. A regulation based on the taxation of incremental earnings would be introduced with enterprises employing 40 percent of the total employment. The ratio of employees whose earnings will be determined by central prescriptions will be 25 percent. These ratios cannot be regarded as final. There still are diverging opinions concerning where and how various forms of regulation should be applied. The discussion may be summarized as follows: the main concern is whether the planned regulation of the level of earnings—combined with given price regulations—can provide sufficient guaranty for that enterprises can pay wages and profit shares only on the basis of realized performances.

The new system of earnings regulation may cause problems of similar nature as the one-time rearranging effect of enterprise income regulation. Namely, the rates of profit and wages are extremely dispersed at present. Where the rate of profit and wages is high, earnings could be extremely increased at the time of change-over, since—with everything else supposed to remain unchanged—enterprise funds will increase owing to the transformation of the taxation system. Obviously, it is not in our interest to exclude these fields from a more stimulative earnings regulation on this account, but to start wage-inflationary processes may not be in our interest.

I have two more remarks in addition to what has been said about earnings regulation and financial interestedness. The first one is that possibilities for increasing earnings depend on the realistically planned development of living standards, real wages and real incomes. These, however, are largely determined by how much we succeed in stabilizing equilibrium and increasing the income producing ability of the economy. There are close interrelations here which may not be disregarded without upsetting prevailing proportions which, again, would have negative consequences.

The right proportions and measures may only be determined on the basis of many-sided economic and political considerations. No matter how living standards will develop, it is indispensable that those with outstanding performances should be really given more income, while the wages of those lagging behind should remain at the same level, i.e. their real value ought to decrease which would express poor performance.

My second remark refers to the requirement that full and efficient employment should be coordinated. There are people who think that the socialist achievement of full employment is endangered by the further development of the system of economic control and management in Hungary. Others deem a certain measure of centrally controlled unemployment desirable. In our view fears are not justified, nor is unemployment needed.

The past practice was characterized by the fact, that, starting from the slogan of full employment, concessions were made at the expense of efficient employment. It is well-known that the ratio of those employed in basic agricultural activities is much higher in Hungary than in countries on similar development level; while up-to-date industrial capacities are not utilized, poorly organized enterprises superfluously engage a lot of workers and the development of infrastructure would require more manpower, too.

The question is—to which no definite answer is available as yet—whether we can change all this and if so, to what extent and in what time. Shall we be able to develop such relations already in the next years which really ensure full employment—the right to work for all members of the society in working age—,but which, in the meantime, do not impede the mobility of manpower adjusted to efficiency requirements? Labour migration between enterprises cannot be rationally organized in any centralized form. This may only be solved through good cooperation between economic organizations as well as competent local councils and employment agencies (labour exchanges). Therefore, more modernizing, organizational and promotion programmes will be prepared in sectoral and regional fields in the course of elaborating the next five-year plan. Various trade union organizations and sections could also take upon themselves more in this regard. However, it is a central task that the conditions be created—including also financial ones—that enable a desirable labour migration within the framework of full and efficient employment.

* * *

The overall modernization of the system of economic control and management serves for mobilizing the creative energies of Hungarian society, widening the sphere of action of economic units and strengthening their interest in the expansion of profitable production, technological development, in exploring new markets and increasing enterprise wealth. Mobilized energies have to serve the realization of our social and economic objectives. These objectives are formulated in the workshops of national economic planning activity and are materialized in various national economic plans. It follows that the efficiency of the control system largely depends on national economic planning.

The April, 1984 declaration of the Central Committee of the HSWP also determines the requirements connected with the further development of national economic planning activity. Accordingly, foreign economic forecasts serving as a basis for planning have to be better founded, the strategic tasks of technological progress have to be defined and efficient economic and social action programmes elaborated. The system of economic control and management transmits, on the one hand, economic policy objectives defined in the plan, but, on the other hand, it also has a repercussion on plans and plan targets, by indicating the state of the economy as well as characteristic reactions of economic units and consumers. In the course of the further development of planning work great attention has to be paid to this repercussion. This is important for the better foundation of national economic plans. We should like to further strengthen the social openness of planning—for which already several initiatives have been taken—by elaborating action and reaction alternatives of the economic policy.

Experience of more than one and a half decades has taught us that the rank of national economic planning and planned economy is not ensured by detailed plan targets or by plan directives, but by whether the plan is capable of aggregating various interests, values, objectives and constraints in a progressive, mobilizing concept for the entire country. This rank much depends on whether planned economy is capable of coordinating and running such a management system which offers a better utilization of possibilities and advantages provided by socialist commodity production to the society.

There certainly are many people who know the simile of one of the most famous economists of the 20th century according to which the economy is an omnibus carrying many passengers with greatly varying interests and possibilities. Paraphrasing this I can summarize our endeavours as follows: we have to improve the work and life of passengers of the omnibus, i.e. of the actors of our economy, in such a way that they may proceed towards the common objectives on the basis of public consensus and with as few obstacles as possible. This is the sense and use of harmony between plan and market.

ЭКОНОМИЧЕСКАЯ ЭФФЕКТИВНОСТЬ — УПРАВЛЕНИЕ ЭКОНОМИКОЙ

Л. ФАЛУВЕГИ

Предпринимавшиеся с 1979 г. усилия по улучшению внешнеэкономической сбалансированности и сохранению международной платежеспособности венгерской экономики увенчались успехом. В то же время сокращение внутреннего потребления национального дохода, включая фонд накопления, имело также и неблагоприятные последствия, поэтому перед венгерской экономической политикой вновь встала необходимость изменений. Автор рассматривает факторы экономической политики, обещающие решение проблем.

Подводя итоги прошедших со времени реформы 1968 г. пятнадцати лет, автор пишет о программе дальнейшего совершенствования всех важнейших элементов системы управления. На первой ступени программы, в 1985 г., будут осуществлены те изменения, которые непосредственно воздействуют на отношения заинтересованности. В 1986 г. нормативы системы экономического регулирования будут согласованы с целями и требованиями 7-й пятилетки (на 1986—1990 гг.), а с 1987 г. будет введена единая система личного подоходного налога и связанные с этим изменения.

Говоря о связи плана и регулируемого рынка, автор рассматривает вопросы рыночного надзора, излагает новые формы руководства предприятиями, а также меры по усилению гибкости системы ценообразования. В связи с пересмотром системы регулирования доходов предприятий автор подчеркивает необходимость материальной заинтересованности в результатах хозяйственной деятельности на длительную перспективу, нацеленной на постоянное умножение материального и интеллектуального капитала хозяйственных организаций. Знакома с новыми принципами регулирования заработной платы и заработков, автор анализирует вопросы полной и эффективной занятости.

TASKS AND PROBLEMS IN DEVELOPING THE HUNGARIAN ECONOMIC CONTROL AND MANAGEMENT SYSTEM

M. PULAI–F. VISSI

The article reviews the principles and requirements that determine the changes to follow in Hungarian economic control and management beginning with 1985. The modifications in the price system, the system of taxation, the control of earnings, in the tasks of enterprise management and in enterprise organization are reviewed.

The article also dwells on the most important dilemmas and concerns under which the planned characteristic changes have to be continually implemented.

After several years of preparatory work, the Central Committee of the HSWP, at its session of April 14, 1984 defined the tasks in developing the system of economic control and management. On the basis of the directives the Council of Ministers issued detailed guidelines and a program of work for elaborating the actual rules and for determining the changes to be introduced.

The substance of the directives and of the documents of the Council of Ministers concerning practical work may be summarized in the following:

– The economic mechanism functioning in Hungary since 1968 has proven that the general principles governing socialist ownership relations, planned economy and the fundamental methods of economic control and management, are today still valid.

– The tasks as well as the international economic circumstances to be faced by the national economy in the 1980s *call for essential changes in the methods of economic control and management*, in order to enable the Hungarian national economy to adjust to the tendencies of international development and create the economic resources on which social development can be based.

– The *targets of economic policy* and the *instruments of economic control and management* must be in much closer harmony than ever, or else the economy as a whole will not be able to exploit the possibilities given by a much narrower scope of movement than that in earlier decades. An adequate harmony between the systems of goals and instruments, a factor of growth inadequately exploited so far, might play a decisive role in the exploitation and bringing to surface the reserves of efficiency.

The changes in the economic control system are elaborated parallel to and in harmony with the formulation of the economic policy conceptions of the 7th five-year plan, covering the period between 1986–1990. The work performed up to now has outlined the possible trends of economic policy, the imaginable scope of movement and

the character of socio-economic policy in the years between 1985 and 1990. The external conditions influencing development of the national economy will, in all probability, not improve perceptibly. Hence, *development will basically be determined by driving forces generated by changes in internal conditions and circumstances.*

The analyses carried out reviewed the complete process of economic control and management from the viewpoint of creating conditions for truly enterprising operation of firms. The guidelines issued by the government determine the changes deemed necessary in the system of economic regulation, in the mechanism of capital flows, in the forms of enterprise management and in several other fields of central government control observing basically the same goal. The essence of the outlined trends and recommendations for further development is that they

- increase the autonomy of enterprises on the basis of greater interestedness and risk taking;
- broaden the sphere influenced by the regulated market mechanism;
- strengthen the effectiveness of government control in the processes basically determining economic development; to this end modify the range of governmental tasks and the established system of connections with enterprises.

The suggestions express higher level requirements raised towards economic management, making it clear that income-holders are only allowed to share in the economic results (profits or losses) realized in the market and that also the limits of spending must be determined accordingly. A socially undesirable macro level rearrangement of incomes can solely be avoided if a redistribution of incomes according to efficiency and performance—expressed in the realized results—will be carried into effect on the micro level (among economic units, plants and employees). The directives of the CC call attention to the fact that this rearrangement will not come about without tensions, for in some cases it will change deep-rooted scales of values. The directives also emphasize: the differentiation of incomes is not only a necessity demanded by our economic interests but is also confirmed by the principles of socialism.

Changes in 1985 and the development of economic control and management

In the course of preparation debates emerged, whether the planned changes—or a significant part of them—can be introduced under such circumstances when the external economic conditions are much worse than they were in 1968. In the past years, time and again, a “manual control” of some economic processes had to be applied in Hungary which necessarily diminished the role of market processes and normative regulators. It is also true that methods foreign to the market cannot be entirely eliminated in the short run. The dispute has not yet been settled, but the changes in economic control are indispensable in order to create the sources which make development possible. It is possible to determine the measures which will result in better market conditions and in

those of economic management and, simultaneously, will allow to abandon the administrative methods introduced in the past years, first of all those applied to draw away or reallocate some of the resources (affecting mainly the successful enterprises) or to replace them by normative types of regulators. Essentially also the directives of the CC had been formulated in the same spirit, emphasizing,—simultaneously with announcing further development of the system—the importance of introducing the necessary measures as soon as possible.

Regarding the time schedule, the ideas about the further development of economic control contain two kinds of considerations:

- the majority of suggestions aimed at further development—mainly the elements directly influencing incentives—have to be introduced, or, at least, their implementation has to be commenced already in 1985;

- other partial recommendations serving for overall development should be carried into effect during the period of the 7th five-year plan (1986–1990).

Thus, to translate the concepts regarding the development of economic control into practice requires continuous activity through several years. Some earlier arrangements complying with the spirit of further development have to be considered as part of this process. Thus the resolutions aimed at developing the planning system are being applied already in 1984, in drawing up the 7th five-year plan. In the framework of the regulatory system the—mostly experimental—changes in the system of producer and consumer prices, in the regulation of earnings and in that of enterprise incomes have been started. Modernization of the market organization, revision of the enterprise organizations and implementation of the necessary changes are also in progress.

1985 is considered as a turning point and several concerted actions will be introduced. These will, on the one hand, affect the conditions of enterprise management, mainly regarding the elements of the economic regulatory system, and, on the other hand, readjust the relationship between the enterprises and the leading bodies of state administration, taking into account the new forms of enterprise management.

In 1986 the system of regulation must be adjusted to the requirements of the 7th five-year plan particularly as regards the rates and standards to be applied. The processes started with the regulation of prices, earnings and incomes, as well as by the spreading of the new forms of enterprise management, have to be carried on. A modernized order of economic administration will also be introduced in (local) councils and other budgetary institutions.

On the basis of meanwhile accomplished analyses, recommendations regarding the taxation of personal incomes have to be worked out together with the relevant changes in the regulation of earnings, in the means of social policy and in the regulation system of the (local) councils. Similarly, a proposal has to be drawn up on possible variants of a normative system of turnover (sales) taxes and on strengthening the role of interestedness in wealth. The date of introducing the new system of taxation is subject to a later decision, but the work is organized so that the proposal can enter into force in 1987 if a positive decision is taken.

In the following we are going to present the interrelations with economic policy and the system of economic control of the changes to be introduced as per January 1, 1985, together with the concerns emerging and the tasks to be solved, grouped around a few prominent issues.

Development of the price system

The envisaged development of the system of economic control is aimed at gradually introducing a market price system. It is a general requirement and, at the same time, a possibility that the domestic producer prices of commodities and services actually or potentially participating in international trade may freely vary—depending on enterprise agreements—between the export and the import price, the latter being increased with the customs duties. The evolution of a market price system depends on several conditions the most essential of which is that for its efficient functioning strong market relations, a dynamic equilibrium between demand and supply and also domestic as well as import competition are needed. This is the reason why we also maintain some administrative restrictions in the spheres where and throughout the time until competition will not become a reality. More accurately, in these fields we apply a price system in accordance with a simulated market, which we deem to be better—even allowing for its deficiencies—than the autarkic price system based on the approval of authorities who cannot but accept, without criticism, any input expenditure.

Another objective of pricing policy is to mitigate inflation that has been emerging in recent years. Inflationary pressure is significant in the Hungarian economy. From the viewpoint of price policy, a decisive significance must be attributed to the system formed by the regulators, whether they are in accordance with one another.

According to our judgement it is possible to gradually reduce the scope of effects of the so-called simulated competitive prices, and to switch over to a price regulation leading to true market prices first of all in the policy concerning industrial producer prices. This must be realized parallel to consolidating equilibrium between demand and supply, which means that we shall gradually also lessen the administrative prescriptions of price formation.

In the *building industry* the precondition of expanding the market price system is a continued improvement of its organizational system, i.e., creation of conditions for actual and real enterprising. *In the sphere of the infrastructure* our main objective is that the commodity character of its services should grow stronger and the role of the profit motive that can be expressed in several forms, should increase. In the majority of infrastructural trades the incentives are supplemented by certain subsidies creating the possibility for adequately financing developments. We also consider it important that if prices are rising because of objective reasons, the mechanism should allow to assert higher costs in prices, as well as to reduce subsidies. We believe that interest in cost reduction can significantly be improved, so that claims for raising prices may be cut down.

The implementation of suggestions concerning the price system is directly linked to the *problem of inflation*. Through a longer period, inflation has two general, essentially economic, causes: one is the existing shortage economy, and the other the inefficiency of work. In the short run other factors may also entail inflationary pressure, for example the rising costs of imports, deterioration in the terms of trade, increasing inputs owing to the worsening conditions of extraction, changes in technology in the stage when they increase the unit costs of production and their effect on saving costs does not yet appear, etc. This inflationary pressure acting in the short run may also cause significant troubles but, obviously, we can only proceed in alleviating the pressure to the extent we are able to succeed in eliminating shortages, or, respectively, in creating a mechanism that greatly prevents acknowledgement of non-efficient work in prices. It is a matter of course that short and long run processes cannot be separated from one another.

It is also an experience of the last 15 years that the profit motive or—the other side of the interrelation,—cost-sensitiveness is not sufficiently intensive in the Hungarian economy, and precisely monopoly positions and shortage situations are the factors causing cost increments often asserted in prices without the control or critique of the market. The price system introduced in 1980 attempted to keep prices determined on the basis of a hypothetical market within artificial limits. In the past years we have also experienced that international competition by itself is not a panacea which would put a brake on, or could essentially diminish, inflation and inflationary pressure. The significance of competition lies not in an unconditional reduction of price increases, but in that it prevents an automatic shifting of costs, forces the producer to economize on materials with rising prices, to enforce technological developments satisfying the requirements of economy too and, in general, to adjust itself to market demands.

In any profit-oriented system an increasing supply offered by producers depends, among other things, on whether the profit content of prices allows them to find their accounts. An anti-inflationary policy must, first of all, be able to reconcile the profit motivated supply of producers (and, of course, demand) with regulations destined to exclude the costs of inefficient labour from prices.

In addition to all these, among the factors bringing about rising prices or resulting in inflationary pressure in Hungary also some caused by the internal mechanism can be found, e.g. such as the permanently increasing tax rates, deficiencies in the mechanism of capital allocation, etc. The main fault of the inadequate capital allocation mechanism is that it necessarily creates possibilities for development projects also in uneconomically operating enterprises, allowing them to subsist, or even to continue extended reproduction. Up to now no such capital-extracting mechanism has been functioning which would be able to prevent the subsistence of non-economical activities, or to force their suppression. It is an important objective to move forward in this direction both in the activities of economic control as well as in increasing the effectivity of the economic mechanism in causing economic coercion. Only this will accelerate the replacement of uneconomical activities by economical ones that pay off rapidly. This process may contribute to an alleviation of the current inflationary pressure.

Price rises cannot be eliminated from the national economy—even in the future,—since they are also attributable to some objective reasons. To put a brake on the rise of prices by using central instruments is justified and possible only to the extent it does not cross the basic aims set by economic policy. We must, at the same time, keep in view that inflation has in many respects negative effects and that the unfavourable effects of continuously growing prices on social policy have to be damped as far as possible. In order to hamper the strengthening of undesirable effects also economic considerations make it essentially important to control the processes resulting in price increase.

Economic control will make active use of budgetary policy. On the one hand, by reducing subsidies it will expose all economic units to the effects of economic coercion, and, on the other hand, by keeping state spendings between strict limits it will curb the today often lavish public consumption. In an anti-inflationary policy it has a great significance to make efforts, using all the possible means of monetary policy and income regulation, at bringing into harmony the generation and spending of incomes with domestic consumption possibilities determined by the requirements of maintaining macro-economic equilibrium. For this reason in the exchange rate policy, as a part of monetary policy, it is necessary to reckon with the export stimulating effect realistically expectable from the exchange rate, which means that it must be prevented that through an unjustified devaluation of the forint currency inflationary price gains be attained and the pressure of inflation be increased. This is the only way the exchange rate—as one of the most important prices—can contribute to stability in the value of the forint currency. Furthermore, some officially set limits and prescriptions applied in the price system and price mechanism also belong to the arsenal of anti-inflationary instruments, such as the prohibition to quote home prices higher than import prices, introduction of fixed prices, etc.

Anti-inflationary financial policy is only one—even if a very important—part of anti-inflationary economic policy. In order to diminish or eliminate inflationary pressure appropriate measures must be taken in the whole system of instruments available to economic control for an efficient functioning of the economy, since in the final analysis this is expected to cause a drying up of the resources of price rises and inflationary pressure. Since inflation, or rather the pressure of inflation comes into being basically in the production and marketing processes, it cannot, in reality, be contained by granting, or increasing subsidies to personal consumption; this may, at best, postpone or conceal it, together with all its negative effects (worsening quality, shortages, etc.). Furthermore, the coverage of increasing price subsidies has to be ensured by some kind of other taxes the source of which can again be created practically through price increases or restrictions on the growth of incomes—primarily of wage and salary earners.

Obviously, in the Hungarian economy there are elements of inflation which cannot be eliminated in the near future and some factors that may temporarily increase the inflationary pressure. By insisting on a more rapid development of the efficient spheres, and on eliminating the ineffective ones, or turning them into effective ones, the development of economic control diminishes the inflationary pressure, or, at least

restricts it to the level justifiable by factors which cannot be eliminated. Such is, for instance, the deterioration in the terms of trade, in the case no period follows when it would improve.

Hence, the question determining economic and financial policy behaviour is not whether prices are increasing or not, but whether the rising prices can or cannot promote a growth of supply resulting in an improvement of living standards. If they can, the price increase is justified, since in this case it participates exactly in the elimination of shortages, which are some of the basic factors of inflation. Thus, the arsenal of the instruments of anti-inflationary policy cannot be detached from economic conditions, the level of economic development, the adopted economic policy. Consequently, the autonomy of this policy is only relative in several respects.

The main characteristic developments in the regulation of enterprise incomes

The guidelines of the Council of Ministers contain the most important and most comprehensive requirements according to which enterprise income regulations—including enterprise taxation—have to be changed. A diversified and multi-purpose task has to be solved. Analyses have proven that the social costs of the reproduction of labour power have markedly increased in the last decade and this has not been adequately felt in the enterprise economy. The paradox that, despite the diminishing annually available man-hours, labour management within the enterprise still has an extensive character, can be explained by the relative undervaluation of live labour. For the creation of interestedness in and—to a certain extent—a coercion to serve intensive development; or, to approach the issue from another aspect, in order that the inputs of the social reproduction of labour power should appear at the place of its use, the costs and taxes linked to the use of live labour must be increased. At the same time, it is necessary to reduce the rate of drawing away the development fund, whereby the tax burden on accumulation and innovation can be decreased in both relative and absolute terms. Another essential requirement of developing the tax system formulated by the guidelines is that, parallel to the changes, the net income and tax content of producer prices should be as far as possible decreased; this means that the collection of taxes must be shifted to the phase of final consumption, to a larger extent than today.

To decrease the net profit and tax content in producer prices is an old problem of economic control. In the past decade the claim to increase the intensity of profit motivation also in this way has been several times formulated. In the course of preparatory work the conditions and ways of decreasing the taxation level of producer prices have often been analysed. The analyses confirmed that this can only be achieved by a general adjustment of administrative prices. In the past 20 years major price adjustments have always been connected with reducing the profit level and—according to the intentions—also the tax level in producer prices. In lack of a market price system, up

to now it has never been achieved to activate a mechanism in which the profit content of price would not grow after an official price adjustment. The situation became even more delicate owing to the fact that, parallel to this, in the course of functioning both the subsidy and the tax content of prices increased. Some progress in reducing the subsidy content could only be attained in the last five years; the result of this was, however, a considerable increase of prices. In turn, the effort to realization of inflationary price remained unsuccessful; this shows a monotonous growth. Undoubtedly, for the implementation of certain objectives of economic policy (e.g., to increase exports) some means had been resorted to which led to the permanent realization of inflationary price gains in a certain part of the economy; the only practical means remaining for "neutralizing" them was to raise taxes.

Thus, the question arises whether it is expedient to implement a full-range official adjustment of producer prices—and if so, in what way—in the framework of which the level of the producer prices, including also the tax level, will go down. Taking into account the tasks we are facing and the changes in economic regulation, we are fundamentally interested in avoiding a general producer price adjustment in 1985. In our opinion a regulation of enterprise purchasing power—which must, owing to equilibrium problems, be necessarily strict—could only be implemented with great uncertainty (taking into account that it is rather difficult to implement a reduction of the price level in those spheres where it would lead to losses); whereas in 1985 (and very likely in 1986) *economic policy cannot do without closely controlling development (investment) purchasing power.*

Under such circumstances a transfer of net social income from the sphere of production into the sphere of turnover can only be implemented to the degree the subsidization of consumer prices decreases. The latter process will unequivocally be subordinated to the living standards policy of the coming years, and to the degree of price increase which is compatible with the total of price rises determined by the living standards policy, and with the rise in the consumer price level owing to rising producer prices.

Thus in 1985, in the course of changing the tax system, priority will be given to the suggestions aimed at carrying out the changes in the tax structure in conformity with the guidelines, within the given level of producer prices and, even if to a small extent, increase the intensity of profit motivation by leaving a greater part of the profit increment with the enterprises working with higher than average economic efficiency than is the case today.

Relying on the results of planning work done up to now for the years 1985–1986, the basic regulatory conditions to ensure national economic equilibrium have been outlined. According to these in 1985 a slight increase in the centralization of all incomes will be needed. This means practically that the present rather high centralization of net social income has to be maintained for the time being and, what is more, safe regulation would make it desirable to increase it by a few percentage points or to strengthen the propensity to save. Hence, the main question is how the changes considered necessary by

the general requirements of the guidelines can be reconciled with the requirements of regulating purchasing power in 1985.

For the transformation of the structure of taxes and in order to meet the requirements raised by the regulation of purchasing power the following points need special consideration:

— As long as the need exists that exports largely exceed imports, the degree of centralization of GDP must be increased, too. This is, namely, the way to ensure that the improvement of foreign economic equilibrium also appears in the domestic regulation and that the incomes deriving from the surplus of the balance of trade cannot be spent in the home market. (In the latter case, the estimates regarding the domestic use of the national income could not be kept and an overdistribution would come about in the economy).

— In the past years the investment purchasing power was strictly regulated, in order to keep the accumulation processes within the planned limits. The regulation included administrative restrictions, special taxes on certain accumulation activities, and a certain part of the enterprise development funds was drawn away. These combined measures considerably raised the charges on the expansion of assets and necessarily exerted a levelling impact on the development possibilities of enterprises (namely, money could only be collected from those who had it). Consequently, the counter-selective character of regulation can only be stopped when the current channels of taxation will be closed and the instrument for drawing away the incomes to the needed degree will be a normative tax. The various methods of taxing away incomes applied in the regulation of investment purchasing power (building tax, investment duty, collection of the development fund, drawing away depreciation allowance) would be replaced by a low essentially uniform tax, assessed in proportion to the enterprise's assets. — We wish to terminate, as soon as possible, the centralization of depreciation allowance. The analyses made in recent years have proved that a rational management of assets as well as the viewpoints of depreciation which reflect the returns render it necessary that the depreciation allowance should, in its totality, remain with the economic units. It is a peculiar problem that increasing the cost of live labour, alleviating the charges on assets and lifting the measures temporarily restricting the investment purchasing power have to be realized—as was mentioned above—by raising the level of the tax levied on the total of incomes, else the basic equilibrium requirement of the 1985 plan cannot be assured.

— Raising the charges (taxes and social insurance contribution) on wages, and the fact that local (city and community) taxes, in the current regulation proportional to profit, will change into being proportional to wages, all serve for increasing the burden of wages. If we succeed in setting appropriate rates, this modification of the tax system may entail in its totality that live labour will become more expensive and the expansion of assets financing the innovation process will become relatively cheaper.

The computations on enterprise level demonstrated that the recommended transformation of the tax structure considerably rearranges the income of enterprises. By carrying it into effect the position of the dynamically developing enterprises will improve

while that of the non-efficient ones may become critical, if their operation remains unchanged.

— The assertion of normativity can be reconciled with the objective features of certain spheres and activities. The facts that in agriculture the gross profit is the carrier of profit motivation, or that in some other spheres (e.g. services) different quantitative parameters are used—as far as justified—in the regulators, all serve for the purpose of that reconciliation.

The changing regulation of earnings

In the further development of regulating earnings the goal is to strengthen the interest of enterprises in raising productivity, involving also a saving in unit costs. The enterprises working more profitably and capable of paying the tax charges on wage costs should be enabled to grant higher earnings to their employees than those with a lower profitability. Changes in earnings should increasingly depend on enterprise decisions and to a lesser extent on administrative orders. These general requirements can be fulfilled if the determination of average wages, or average earnings of the enterprise—which has caused so far several distortions—will be eliminated from, or pushed back to a much narrower sphere of central regulation, and if the—almost prohibitive—taxes levied on the increment of wages or earnings will be abolished.

Within the regulation of earnings the role of macro level regulation influencing real consumption and the role of taxation (according to personal income) will grow and that of the mechanism restricting the outflow of enterprise income will decline. In the course of elaborating the detailed recommendations we are striving to achieve that, beginning with the 1st of January, 1985, a regulation of earnings in accordance with the principles described here be in operation already in a wide scope. It is, however, obvious that the actual sphere in which the regulation of earnings becomes active will be determined by the extent to which the control system will be able to operate the national economy in conformity with the requirements of equilibrium. It also depends on how far it will be able to assure that the source of earnings, or their increment, should be the realized national income, or its increment, and no possibility should arise for increasing earnings from inflationary price gains.

A cardinal point of the debate on the suggestions regarding the regulatory system was how far the substantially changing motivation system should be based on the lifting of restrictions on the price system and how far on eliminating those on the wage system. *The possibility of choice* is open, namely, whether to apply wage regulations less binding on enterprise management, or, on the contrary, to loosen the limits of price regulations and, at the same time, operate strict regulators restricting the growth of earnings.

On the basis of consultations with enterprise managers the variant of loosening the constraint on wages has been chosen. It was, namely, a common reaction of theirs that the enterprise is more restrained in its actions by the regulation of earnings than by price regulations. It also stands for a strict price control that the administrative brakes can only

be gradually released within the price system, at the rate the relations between demand and supply allow for a balanced development.

The essence of the recommended new system of wage regulation is that enterprises pay a tax on every single forint of wages from their profit—i.e., not only on the increment. The tax has to be assessed individually, on the basis of the yearly earnings of employees, and not on the average wage calculated on enterprise level. When determining the basis of assessment, the incomes paid out by enterprises under different titles have to be added up. The role of taxes has to be determined by the viewpoints of reconciling proper incentive with the necessary output requirement; therefore a moderately progressive tax has been recommended.

Since the recommended regulation allows a greater part of a unit of savings to be allotted for wages, interest in costs reduction will expectably grow. At the same time, the enterprise is under obligation to pay annual taxes on the basis of earnings. Those enterprises which cannot afford to pay this, are forced by the regulation first of all to make the enterprise more profitable by modernizing production and reducing costs. If the economic unit cannot develop such a program, it has to reduce its staff. Thus, the suggested method is an incentive to get rid of redundant labour, since it also eliminates the inflation of staff implied by regulating the average wage of the enterprise

Changes in enterprise management and the organizational system

During the preparatory work we have been actually searching for an answer to the question whether it is the essence of state ownership which causes the intertwining of the proprietary, management, administrative and economic tasks and their concentration to the ministries. We have investigated the possibility of separating and rearranging the above mentioned four tasks and functions from the viewpoint of a reasonable way of economic control. The analyses have shown that the functions of administrative authorities and economic control can be linked up quite closely, so it is relatively unequivocal that these functions have to be exercised by the supervisory authorities. In the past decade government control and the relationships between economic control and enterprise management underwent such changes in the majority of the socialist countries as well as in Hungary, which placed a part of proprietary decisions with the particular economic organizations and relatively unanimously invested the economic units with the task to decide themselves on questions regarding operative economic actions. Parallel to this process, the right remained with the control agencies to make so-called basic proprietary decisions, comprising decisions on enterprise organization, the strategic decisions specifying the main activities of the enterprise and the employer's rights exercised towards the managers of enterprises.

With the act on enterprises passed in 1977 the Hungarian state enterprises left the chain of hierarchic government administration, and from among the basic proprietary

decisions those of business policy affecting the organization and strategy of the enterprise became the right of the enterprise. In the past ten years some differentiated forms of state ownership have been established (associations, joint ventures, subsidiaries, etc.), whereby the state monopoly of founding enterprises has practically ceased to exist. Often double structures of enterprise management were formed where ownership functions and the supervisory rights were separated from the management decisions closely connected with operational enterprise activities.

Researches and analyses dealing with the contacts between central economic control agencies and enterprise leadership detected the deficiencies and contradictions in the current order of operations. They called attention to the fact that establishing an enterprise is itself a venture. Consequently, the founder has to be in possession of the whole sphere of vision, all the responsibility and information that is needed for decisionmaking in the issue of an undertaking. Sociological research has pointed out that in the present system of relationships enterprise managers become civil servants and bureaucrats, and this keeps them back from making entrepreneurial decisions from the outset. Even the introduction of the competition system* has been as yet incapable of changing this situation essentially. In the past years no success has been achieved in developing some clear-cut solution concerning the interventions on behalf of the state organs of economic control into enterprise management. The broad informal contacts continued to exist, the "responsibility for supply" with its obscure content opened up the way to a direct transmission of national economic interests. All this disturbs the connections between enterprise management and economic control. Furthermore, the current division of tasks and functions also inhibits the accomplishment of the real tasks of economic control and of those tasks that are the responsibility of authorities. Hence, to review the system of contacts between the ministries and enterprises is justified not only from the side of the enterprising managers but also from that of economic control and management bodies.

The directives of the CC and the guidelines contain provisions to develop two novel forms of managing state enterprises. In the case of smaller state enterprises (with elected leaders) a management form will come into being in which the advantages of the cooperative type of management can assert themselves; in larger enterprises, enterprise councils will be set up, as organizations for making strategic decisions. The essence of the latter proposition is that it institutionally provides for the collective's participation in enterprise management, also expressing the intention to entrust the collective which directly experiences the efficiency of the enterprise's operations with judging the manager and senior executives. We do not wish to deny even the expectation that, since this will be the primary body to qualify the work of the manager, there will also be a chance to win the really gifted, creative persons, who are qualified for the task for the leading posts. There still are many places where it is necessary to raise the standards of management, to develop a highly qualified stratum of leaders, since it is they on whom the successful

*for higher executive posts—Ed. note.

operation of the enterprise, the creativity of the collective depend, and, to a large extent, also whether people (especially the talented) will work with pleasure, or perhaps escape from the enterprise.

The recommendation also modifies the relationship between enterprise leadership and economic control and management. It entitles central economic control with the unequivocally declared right of supervising legality as to the lawful activity of the self-managing organization; within the scope of authority of market surveillance, in case it is needed for the assertion of national economic interests, it makes possible intervention by the government. The ministries will have to perform their supervisory tasks as specialized authorities according to the present system and the founding organs of state administration are entitled to exercise the rights or agreement in essential organizational questions and in appointing the manager.

The novel regulation of contacts between the government bodies of economic control and the enterprises is also expressed in that towards enterprises that will be working under the new form of management the function of supervision in the present sense will cease to exist and the sectoral ministries do not receive the right to intervene in management processes in the framework of supervising legality. The system at the same time makes it imperative that the control system applies a strict regulation transmitting the interests of the national economy to the economic units with proper intensity. In the organization and regulation of the market, in averting the troubles of the market, the central market surveillance organ will play a substantial role.

To attain efficient functioning of the new forms of enterprise management, time is needed. The recommendation presupposes that the bringing of interests into harmony will be realized not through hierarchic relationships but through contacts made by interdependent parties of equal rank. This objective calls for such relations within the enterprise, and in the management structure of the enterprise, which produce equilibrium between the abilities to assert interests and—as deriving from the essence of enterprise councils—make unambiguous the necessity of cooperation between senior executives and the collective. The recommendation also presupposes that—according to the requirements for the functioning of enterprise councils—the competence spheres of decisions will be rearranged within the enterprise and in the accounts serving for providing foundation for internal motivation the differences in performance will become clearly visible; and, as a result of all these, factory democracy will be supported by adequate incentives. We also wish to demonstrate hereby that at the outset the new forms of enterprise management will mainly open up new prospects for favourably transforming the relationship between economic control agencies and enterprise management as well as for better motivation within the enterprise.

The government bodies will make this year the decisions that will regulate the operation of the new type of enterprise management, and according to which the necessary changes will be carried out in state administration and in the division of labour among the particular organs. According to the prevailing ideas the detailed legal rules will be made public in the autumn of the current year (1984) and the sectoral and functional

leading organs, also involving the Chamber of Commerce, will elaborate propositions regarding the introduction of the new forms of enterprise management and the pace at which they should be introduced.

Parallel to developing the new forms of enterprise management, also the modernization of enterprise organization is being continued. It is mainly in the manufacturing industries that it is necessary to bring about the forms of enterprise connections and organizations suited to the conditions of economically efficient cooperation and to the optimum plant size. To judge this is basically the task of the economic units, the leading government organs count therefore upon a creative behaviour in developing the main lines of transforming the organizational system, based on the interests of the enterprises. The government organs are continuously reviewing the current forms of the innovation and marketing chain and suggest modifications when it seems to be justified. The fundamental objective of this organizational transformation is to achieve harmony between the size of the enterprise and the necessary capital concentration. Richer forms of capital flow and the simultaneously changing organization render it possible that the development of the optimum organizational forms and the concentration of capital invested in production should be expediently separated from (or linked to) one another, in order to ensure that the enterprise organization system, as well as the multitude of cooperation variants develop on the basis of mutual interests. The purpose is to avoid that organizational constraints inhibit profitable activities.

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Within the framework of this paper we were given the possibility to touch upon some components of further developments in economic control and management, and we were striving at selecting the most topical elements. The directives of the CC also called attention to the fact that the conceptionally uniform suggestions of the development of the mechanism can only be introduced gradually, following a well founded preparation, since the receptivity of economy and society, as well as the degree of the resulting differentiation have to be taken into account.

Those anxious about the reform process in Hungary, often point to the dangers and dilemmas of gradual implementation. In their sceptical remarks they stress that it is exactly the character of the changes that may become diluted through gradualness and in this case the changes will cause more harm than good to the economic mechanism. This consideration results in the opinion that the recommendations have to be urgently implemented, so to say, with a single blow, so that the changes may bring about the results as soon as possible. The danger in this basically positive approach is that impatience may lead—owing to the uncertainty of some factors—to heavy imbalances and other undesirable consequences, e.g. the affected strata could not bear (in our present judgement) a sudden and significant rearrangement of incomes without serious troubles. The “risk” of gradual implementation is, on the contrary, that the processes slow down, thus though diminishing the conflicts arising in the given period causing, at the same time,

delay in the unfolding of the positive effects. In the latter case the danger is really that a reflex-like "rearrangement" may take place which—as has already occurred several times—did always harm to the reform processes.

It is on the whole obvious that certain compromises have to be made between the suggestions aimed at further development of the system of economic control and management and the changes to be realized in 1985. The risk of "rearrangement" is reduced by the political endeavour to solve the conflicts of interests on the level of those interested. This is why the changes of management include some suggestions attempting to solve the conflicts of interests at the place they arise.

Recently, the question has been often raised when the suggestions will bring tangible benefits. In this respect we should like to call attention to the fact that the economic leadership reckons with the positive effects exerted by the suggested changes on economic growth and on the resources that can be spent but, owing to the differentiation of enterprises and earnings, the positive results will not be generally felt. We should also like to stress that the totality of the recommendations take into account the changes in social, sociological and moral factors, too, the effects of which will clearly not appear overnight. It is enough to mention that an improvement of labour discipline cannot be attained merely by provisions of law, hereto also the evolvement of the aforementioned social effects is needed. Thus, the effects of the continued reform process of the mechanism, which can be positively qualified by the masses of society, will become manifest by summarizing and combining the social and economic results.

ЗАДАЧИ И ПРОБЛЕМЫ ПРАКТИЧЕСКОГО РАЗВИТИЯ ХОЗЯЙСТВЕННОГО УПРАВЛЕНИЯ В ВЕНГРИИ

М. ПУЛАЙ—Ф. ВИШИ

В мае 1984 г. венгерское правительство приняло директивы о развитии хозяйственного механизма и одновременно наметило рабочую программу по разработке подробных предложений. Статья раскрывает принципиальную основу предстоящих важнейших изменений и знакомит с планируемыми на ближайшие 2—3 года изменениями экономического управления, выделив несколько особо важных тем. Изменения хозяйственного управления касаются перегруппировки задач между органами управления экономикой, системы цен и налогов, определяющей и влияющей на условия и правила хозяйственной деятельности, финансового регулирования, механизма распределения капитала, а также форм руководства предприятиями. Авторы рассматривают отдельные элементы прежде всего с точки зрения распространения хозяйственной деятельности предпринимательского характера, то есть усиления самостоятельности предприятий на основе повышения их материальной заинтересованности и принятия ими риска, расширения сферы действия регулируемого рынка. В то же время изменения повышают результативность государственного управления в процессах, оказывающих решающее влияние на хозяйственное развитие.

Основное направление изменения системы цен — распространение сферы действия системы цен, отражающей условия внешнего и внутреннего рынка. Это будет осуществляться параллельно с улучшением рыночной сбалансированности, иначе может повыситься инфляционное давление.

Изменение структуры налогообложения служит нескольким целям, прежде всего изменению обложения живого и прошлого труда, способствующему интенсификации экономического развития, повышение доли налогов, нейтральных с точки зрения конкуренции.

В соответствии с изменениями, которые произойдут в отношениях между органами управления экономикой и руководством предприятий, уменьшится зависимость руководителей предприятий от министерств и руководящих органов, а принятие решений, касающихся имущества, капитала и организации предприятий, будет передано однозначно в компетенцию руководящих органов (советов) предприятий

PROTECTION OF THE PRICE LEVEL AND A DYNAMIC ECONOMY

J. ZALA

Relying on an analysis of economic development over the last 14 years, the authoress finds a close relationship between the relatively fast rise of the price level and the relatively slow growth of the Hungarian economy.

Emphasizing that, in the interest of bringing about equilibrium, the earlier suppressed cost-inflation impact had to be enforced—if belatedly—in the economy, time has now come to stop the process. The authoress also proposes a therapy, suggesting measures with which the inflationary process could be slowed down and then stopped and economic growth might be accelerated.

Hungarian public opinion looks on a regular and, particularly, a rapid rise of the consumer price level as something undesirable and shows little toleration for it. This becomes unambiguously clear from conversations and from anxieties voiced with growing emphasis on various political platforms. Hungarian society is particularly sensitive to rises in the consumer price level, commonly called “inflation”, because older people in Hungary already lived through one or two inflations, including the devastating one of 1945–46, a record-breaker by international standards. Sensitivity is growing when the rise in the consumer price level is accompanied by falling real wages, or if the incomes of large sections of society (e.g. of those living on a pension) considerably deteriorate under the impact of rising consumer prices.

Aversions on a social scale are generally signals and carriers of conflicts. This is why the attention of those in charge turns increasingly towards prices, changes in prices and the shaping of the price level. The government is looking for a solution and expects economists to submit suggestions that will help to defuse the social and economic conflicts that are due to the rising price level.

We have to dig deep for an answer. Only a manysided analysis of reality can make the proposals pointing towards solution trustworthy. Only in the case of genuine and trustworthy answers can one count upon the understanding and active cooperation of people, when difficult steps, unpopular for many, become necessary to fight inflation or to prevent it.

Changing prices become social and political problems through movements in the *consumer* price level. Attention devoted to the consumer price level is also justified from the economic viewpoint as every kind of change in intermediate (producer, import and investment) price levels sooner or later entails changes in the consumer price level as well. The price level expresses in every case an average, but the population can perceive changes in the price level only through changes in the actual prices of particular products and

services. This may lead to the—misplaced—desire that changes in individual prices ought to be fixed centrally and that the stability of the price level ought to be secured in this manner.

But changes of individual and relative prices are necessary. Under the impact of performances, quality, fashion, supply and demand, prices of individual products do, and have to change. Inflation cannot be fought by permanently freezing the prices of products and services. In this case, shortages might emerge in some products or unsaleable surpluses might accumulate, at the very least the structures of supply and demand might become rigid. The price level may remain relatively stable even given changes in prices. (To avoid misunderstandings: by a "relatively stable" price level I mean, under Hungarian conditions, a smaller rise in the consumer and producer price levels than has occurred hitherto, that would later be restricted to 3–4 percent, per annum, that is, to less than the growth in productivity.)

The lasting change of the price level is *merely a phenomenon*, indicating a shift of equilibrium between the total outflow of demand (in terms of money) and the total supply facing it (production and imports). What we have to fight is thus not simply a rise in the price level: the conditions have to be changed under the impact of which such an increase in the price level occurs.

Extent and function of the rise in price level in Hungary and elsewhere

The consumer price level roughly doubled in Hungary between 1970 and 1984. (If the consumer price level in 1970 is taken as 100, by the end of 1984 the price index is around 202 percent.) This is somewhat more than the rise in the consumer price levels of the Federal Republic of Germany or Switzerland, equally over 14 years, but somewhat less than that of Austria, the Netherlands, Japan, Belgium and the United States of America. (The price level of the latter has risen to its 2.2–2.6-fold over the last 14 years.) Thus, in the last 14 years the rise in the Hungarian consumer price level has been, on the whole, the same as that of the industrially most advanced countries. In the Western countries listed, however, the bulk of price rises happened in the first half of the period, while in Hungary the consumer price level increased by 25 percent in the first and by 62 in the second seven years.

The great Western wave of inflation was triggered off in the early seventies by "cost inflation" (the oil price explosion). The suddenly soaring costs of energy cautioned investors and restrained even the use of productive capacities. All that reduced supply, entailing renewed inflationary effects. This phenomenon was named "stagflation". But some of the advanced industrial countries soon overcame the deterioration in the terms of trade. They attained this by reducing, within production, the use of energy and other materials that had become expensive, and by increasing the export of those products which could be sold at higher profit because of their higher technological content. The

sooner and the more consistently a country adjusted itself to the changed situation, the greater was its success in expanding supply and the faster it has overcome inflation (thus, e.g. Japan, the Federal Republic of Germany, the Netherlands).

In the first half of the period Hungary tried to protect the economy against inflation. Beyond the wellknown problems (imports believed to be cheap, foreign indebtedness etc.) this also entailed the failure to adjust to the changed situation in time. Thus, in the first half of the period, problems remained hidden and accumulated the solution of which put a burden on the second half. In this second half of the period (between 1978–1984) the drawing in of foreign resources was gradually but considerably restricted and, starting with 1982, the withdrawal of external sources from the economy began.

*External sources in percentage of
the Hungarian GNP (value
added), at current prices*

Year	Percent
1976	+4.0
1977	+4.5
1978	+9.1
1979	+3.3
1980	+2.2
1981	+1.1
1982	−0.8
1983	−2.0*
1984 about	−3.5*

+ drawing in of external sources

− withdrawal of external sources

*preliminary or computed data

Source: Jövedelemelosztás a népgazdaságban 1976–1982 (Income distribution in the national economy 1976–1982) Központi Statisztikai Hivatal (Central Statistical Office).

Thus, the second seven years were characterized by a contraction of aggregate supply. To some degree the ratio of foreign sources was reduced relative to total domestic production, and the domestic use of national income was restricted, entailing a significant slowdown in the rate of economic growth. A rise in the price level ought to have occurred in the first part of the period, as a consequence of cost-inflation. But the price level remained relatively stable. In the second part of the period when, in consequence of a

moderation of world market price rises, the pressure of cost-inflation diminished, and when aggregate demand as well was reduced in Hungary, the rise in the price level ought to have slowed down. But the consumer price level increased in this period much faster than in the first seven years.

What was the cause of this paradoxical situation? Can we draw the conclusion from this that in a planned economy we can make ourselves independent of the laws objectively asserting themselves under commodity production?

Let us first see what really happened in Hungary. It was general practice in countries with a planned economy—and the practice is still alive in a wider or narrower scope—that prices were centrally fixed and the price level was governed in this manner (generally close to stability). Earlier aggregate demand and aggregate supply were worked out in Hungary, too, in terms of physically defined quantities of materials and products, and they became detailed plan-instructions. When later the balance between aggregate demand and aggregate supply was nevertheless upset, generally at the expense of the latter, a shortage emerged. It was attempted to eliminate or ease this shortage, signalled by queuing, with the aid of imports, or by creating new capacities, and (much less frequently), by raising prices.

The possibility and necessity of *controlling aggregate demand* arose already in 1968, at the time of the introduction of the reform, and since then it has become a partial practice in respect of wages and earnings, more recently of investment. Yet it was the regulation of prices and the price level that was considered the main tool of securing equilibrium. Thus, in market economies changes in the *price level* are a signal, a *consequence* of the correct or mistaken nature of the instruments (measures) applied in the course of regulating demand and supply; while in Hungary prices and the price level were considered to be *tools* (and still are considered that) for ensuring that the real values of aggregate demand and supply should shape as planned ones.

Between 1970 and 1978 the opinion prevailed that the cost-inflation filtering in from abroad could be warded off and the rise in producer and consumer prices artificially restricted through central regulation. The artificially depressed domestic price level increased domestic demand, and attempts were made to satisfy it by increasing imports. Imports were financed from external credit sources, ample at the time, and the external sources also provided cover for a part of the investment needs of the development and reconstruction projects. Thus, the drawing in of external sources also created additional domestic demand.

After 1978 it became obvious that the drawing in of external sources must be halted, in fact, as the burden of debt servicing became ever graver, high-level government decisions were also aimed at a gradual withdrawal of external sources. In order to be able to implement this task, domestic consumption had to be curbed, so that a part of the available supply might be used abroad.

But the restriction of demand was again interpreted for the real processes, that is, demand already present in money terms was readjusted—at least partially—to the level planned in terms of volume (in real value) *using the instrument of raising the price level*.

To complete the picture: if the outflow of aggregate demand (at current prices) *precedes* the expansion of aggregate supply, the raising of the price level is the only economically feasible solution to avoid quantitative shortages (queuing, etc.), provided that there is no way, and no intention, of drawing in external sources. Thus, right after 1978, the rise in the price level would have occurred even if the process had not been centrally governed.

Facts have justified the central control of the price level. It was in this period that the external economic equilibrium of the country was restored, and this was one of the basic goals of Hungarian economic policy.

Is the price level a signal system or an instrument for restricting demand?

The numerical interrelations suggest that economic equilibrium (between aggregate supply and aggregate demand) could be secured either through a deliberate control of the price level, or by adjusting the outflow of demand in money terms to supply (e.g. by restricting credit, by correcting existing demand through taxation, or through strict controls of the wage level). Yet, when it comes to the social and economic impact, it is certainly not indifferent what kind of instrument is used—and when—to secure equilibrium.

Prices, relative prices, and the price level itself, are measuring instruments and, at the same time, important carriers of *information* for the economic units. If this standard is artificially set higher or lower than what it would be without interference, this important information-carrier role will cease (will be suspended). Experience in Hungary over the last fourteen years provides proof of that. The official keeping at bay of the cost-inflation impact of the oil price explosion (and of raw material prices) eliminated the economic compulsion to improve the terms of trade. Incorrectly orienting relative prices failed to release the efforts the economy should have made immediately and urgently to improve the terms of trade. (Large reduction of per unit energy and material consumption, rapid transformation of the product pattern etc.) *After* the significant correction of the relative producer prices and the price level in 1980, however, the prices of energy and of some important basic materials were raised (as well as the level of producer prices) in a period when, for foreign competitors, a falling price level, or its smaller rise than in Hungary, were already characteristic.

Anticipated changes in prices, and the price level, influence the economic decisions and behaviour of the economic units to an even greater extent than actual price changes do. The frequently repeated theory that “if prices are rising, demand will fall and supply will grow”, or *vice versa*, is oversimplified and does not always hold good. In reality, if consumers and enterprises expect a rise in prices, they will bring forward such purchases (later demand) which they would not have thought of with stable prices or an expected falling price level. Producers (and traders) do not hurry to offer their products for sale if they expect a rise in prices.

With an artificial and regular rise in prices we elicit from both consumers and producers—at least for some time—behaviour precisely contrary to what we want to achieve in the interest of curbing aggregate demand and expanding aggregate supply. If the price level is expected to rise for some longer period, demand will artificially expand (or at least occur earlier in time), the propensity to save will slacken and supply will not grow satisfactorily. Producers will hold back supplies, in fact, since a rising price level can even automatically secure profit, they will be prompted not to exploit their capacity to the maximum (particularly, if they are not sufficiently interested in increasing profit).

A centrally controlled rise in the price level entails a further considerable economic drawback from the point of view of national economic equilibrium, to which little attention has been paid up to now. *A rising price level creates additional demand flowing out in money form.* Thus, while on the one hand we wish to restrict the real value of demand by raising the price level, on the other hand we expand demand flowing out in the form of money precisely by doing so. But this not only expands aggregate demand, it also rearranges real incomes—perhaps in a manner undesirable from the social and economic aspects.

How does this process take place under Hungarian conditions? It is easy to see that if the level of selling prices rises given an unchanged output level, net income remaining after the deduction of costs will automatically rise. The total output of the national economy (total domestic supply) increased between 1980 and 1983 by 8.6 percent in terms of volume and by 26 percent at current prices. Since the depreciation allowance and labour incomes increased by less (11 and 23 percent, respectively) the growth of net income was a round 30 percent. Thus the value of supplies was raised between 1980 and 1983 to a large extent by the rise in the price level. This allowed domestic effective demand to expand, since the 8.6 percent quantitative surplus was faced by a 23 percent increment in labour incomes and a 30 percent one in net incomes. The latter was shared by the budget and the enterprises, and in such a way that, in the final analysis, through the greater centralization of net incomes, the demand position of the budget improved (the deficit diminished and centrally managed special funds could be created from increased taxes).

In recent years demand has been controlled using two instruments in the first place—

- a deliberate *raising of the price level* in order to reduce the real value of demand flowing out, or already present in money form, to the planned level;
- a *later tapping* of incomes that have already flowed out in money form by taxation, and other fiscal instruments.

The increased taxation of net enterprise incomes was initially justified by efforts to overcome the budget deficit; later, however, increasingly by the need to suck back the additional purchasing power caused to no small degree by the rising price level and which—in the absence of taxation—might have increased demand for investment on the part of the enterprises at the expense of external equilibrium.

The medicine proved to be effective for an acute illness of the Hungarian economy. It put a brake on further indebtedness, has stopped excessive investment. External equilibrium has improved, investment has diminished and, what is most important, their cyclical movement has ended. But medicines are not cure-alls, they also have side effects. If other complaints gather momentum, or the consequences of the side effects are harmful (in the given case, for society and the economy), it may become expedient and timely to experiment with other, new kinds of medicines, or try to alter the doses of what we are swallowing.

The side effects of raising the price level are increasingly negative, particularly in the present external and internal socio-economic environment. Here are a few: We no longer import inflation (import prices are not rising, or do so only slightly), and much less have we succeeded in exporting it (i.e. in passing on higher import prices to export customers), thus the terms of trade are deteriorating. In consequence of rising average consumer prices money incomes are redistributed in a manner that is not in conformity with Hungarian socio-economic objectives. Enterprises, particularly some of them, automatically profit from rising prices, and the result is that their demand would grow, but they know that—precisely in order to control demand—this surplus would be taxed away from them anyway. This prompts them to withhold performance. In consequence of increasing taxation conflicts between enterprises and the control agencies (mainly fiscal authorities) become deeper and more frequent. The proliferation of posterior and not normative levies also increases the necessity of providing exceptional and individual help. This again entails rearrangements of income that are contrary to Hungarian goals.

The list of side effects could be continued. But the most important thing is that, although external equilibrium has improved, and domestic demand has been successfully curbed, problems tend to condensate at two points: the price level continues to rise and economic growth is slow, supply does not expand sufficiently. Public opinion, understandably, urges an easing of this dual trouble, wishing to slow down the rise in the price level and to make growth dynamic once again.

Whom do price rises benefit and who suffer as a result?

If an economic process has a negative impact and this durably asserts itself, it is worth investigating who, what sections of society, what actors in economic life are interested in the inflationary process and to what extent they are injured by it, or, in other cases, why they are neutral towards the phenomenon of inflation.

In examining interests, the starting point should not be the particular (and complex) interests of persons, *but economic roles and functions*. The same person may be both producer and consumer, attempting to make a profit, as well as a taxpayer etc. We should rather examine which is *the more powerful* in the conflict of interests, and, what interests are finally asserted in the case of those who tolerate and even reinforce inflationary effects.

A rise in the consumer price level is generally judged negatively *by consumers*. They understandably show even smaller toleration for shortages and queues. This supports the argument of those defending inflation that a rising price level is still better than queues and shortages. This is no doubt true. Nevertheless, the fact that inflation is the lesser evil does not reduce the aversion of consumers and does not acquit us from searching for such solutions which moderate the impact of both evils.

Consumers do not constitute a homogeneous mass. There are people who, owing to their place in production and the way they make their money, are able to shift the negative impact of the price level—directly or indirectly—onto others. Frequently, this shift produces a surplus for them, sometimes even without having to offer greater performance. The inflationary process is advantageous for such people, thus they tolerate it well, and even reinforce it as producers (mediators). Under prevailing Hungarian conditions this section of society is not negligible.

In principle, those consumers are indifferent to inflationary burdens who are capable of increasing their incomes at least in keeping with inflation; however, this fact is sensed by few people in practice.

High-income families and individuals tolerate inflation better. If a high-income family has already satisfied its usual, normal, recurring needs, there remains a part which it could either save or spend on the satisfaction of a special, one-time need. (E.g.: a trip abroad, acquisition of durable consumer goods of high value, purchase of a home or a building site etc.) The neglect of saving or the putting off of realizing great dreams can be better tolerated than if normal needs can only be satisfied to a diminishing degree. In spite of this, inflation may influence the morale and performance of this small but highly important section of the population in a disadvantageous manner (it also includes executives).

There are, however, large sections where we do not find factors dampening the negative impacts of inflation, and where social dissatisfaction appears in a stronger form. Inflation unambiguously causes damage to those consumers whose income (per capita family income) does not keep pace with inflation. They are first of all those workers and salaried employees who have no access to complementary earnings, further those with a large family, as well as a growing number of retired people.

But the behaviour with which consumers protect themselves against inflation, unambiguously generates inflation. Expecting price rises they bring forward demand. They do not buy things when they need them, given a normal budgeting of their income, but when they are available and they can get hold of the money. If they can, they expand their purchasing power by raising credit. Long-term loans at low rates of interest are particularly favoured forms of expanding demand. The annual interest burden of these credits is much lower than the rate of inflation expected by people. The working population also expects that the nominal increase of their incomes will sooner or later keep pace with inflation. Thus, when people become debtors, they become interested in growing inflation in this capacity. Therefore, they increase their indebtedness at times of inflation. This is, however, merely a protective reflex, not a deliberate instrument to

promote inflation. Thus, consumers as a whole, are essentially injured by inflation, even if not to the same extent. The general public uniformly condemns inflation—regardless of the degree to which it is damaged by it.

Enterprises as *producers* are interested in price rises; as users of materials, they are, of course, against them. The intensity of opposition depends on whether they are able to pass on price rises, and if so to what extent, either directly, by raising their own prices, or indirectly, by obtaining central subsidies. Inflation, however, disturbs cost-calculations, and plays havoc with development decisions. This occurs particularly if the rate of the domestic inflation is higher than that of foreign trade partners. In Hungary, this situation has been prevailing in recent years.

Enterprises may be interested in inflation as investors. The investment hunger of socialist enterprises is known to be great. There is a rich literature on the subject, I will not, therefore, discuss the causes. This, already existing, investment hunger is reinforced by the anticipation of inflation. (That the prevailing Hungarian practice of taxation makes it impossible for enterprises to increase their investments is another matter.)

At times of inflation enterprises are inclined to overestimate expected returns and to take on unrealistic (and unforeseen) burdens. Enterprises as *investors* are, in principle, interested in inflation, but only as long as the real rate of interest on the credits raised is lower than the real returns on investment. The nominal rates of interest prevailing in Hungary (and all over the world) significantly exceed the rate of increase of the price level. Real rates of interest are high. (About 8–9 percent in Hungary.) In principle, a high real rate of interest reduces demand for investment, at least by those who predict with relative certainty that their investments do not promise a real return higher than 8–9 percent.

Hungarian firms as investors feel first of all the const-inflating impact of high rates of interest, this is what they have to ward off, if possible also by raising prices. In Hungary, however, it is not the high real rate of interest that puts a brake on investment demand; all the less so as it is known that a curbing of investment demand will sooner or later occur, as a result of central measures not announced in advance, and to an increasing extent, and *a posteriori*. Thus, those who can invest, all the more so since no one is called to account later because of the real returns expected from investment. Thus, the true economic constraint is missing, consequently enterprises are interested in inflation as investors, or at least they are indifferent to it.

The central *banks*, as agencies responsible for demand control, are practical executors of monetary policy and are, in principle, against inflation. It is in their interest that the value of the money placed (invested) should not diminish, that it should be invested as capital earning safe (and not only high) returns to the possible greatest extent. Thus the central banks generally do not spread inflation.

But banks are never injured by inflation. To the extent that they are creditors (that is, anti-inflationary), they are also debtors. Thus, owing to their position they are capable of passing on losses due to inflation to those who placed money with them. On a domestic (national) level this is surely true, but this possibility is not as unambiguously

present on the international level. It is easier to acquire foreign deposits (to incur debts), if the domestic price level is relatively stable, and with such a price level a higher rate of economic growth is expected than in the country from which deposits are expected. (This was the situation in Hungary in the seventies.) But the safety and liquidity necessary for banking transactions is only well founded if foreign inflation is faster than inflation at home. (If credit can be repaid with relative price gains.) Therefore a bank—the Hungarian banking system included—would be mainly interested, first of all because of the impacts of international relations, in a relative stability of the domestic price level.

The bank, however, also has the possibility to increase inflation actively and directly. It can do so by giving the green light to or relaxing the outflow of demand, and by granting credits in a volume exceeding the expansion of available resources (savings). E.g. it is an inflation-generating activity if the bank, to finance budgetary deficits, speeds up the banknote printing presses, or improves the conditions of access to credit for enterprises without an adequate growth in performance, or if it expands the limits on personal credits. This generally occurs, however, not because of some particular "banking interest", but because some aspect of economic policy demands it.

The particular interests of the state *budget* may strengthen the inflationary process. The starting point for budgetary management is the size of government expenditure. If government expenses increase—on the basis of central decisions or automatically—faster than GNP, this may in itself raise the price level. In this case, the budget is forced to centralize a growing part of GNP as revenue in order to cover increasing expenses. If it does not do so, the budget deficit will grow, that has to be covered either by drawing away capital active in the productive sphere in the form of credit, or by an increasing issue of money. If economic policy commands a halt to the increase in the budget deficit, it will be the reduction of the deficit that will necessitate the drawing away of capital from the sphere of production. This, too, has an inflationary impact as it increases tax burdens and narrows real supply.

In specific situations the budget deficit can be financed for some time by the inflow of foreign capital, as has been the case in the United States in recent years. At present, however, this option is not open to Hungary.

Under the Hungarian conditions the budget may have an important role in increasing inflation. If the central budget taxes away much larger sums from the economic sphere than what would follow from the strictly limited expenses, the real danger always exists that these sums will be used either for consumption by the public authorities or to help enterprises in distress or running at a loss. Thus, when the state budget is in the red, when it reduces its deficit by increasing revenues (taxes) and not by curbing expenses, it generates inflation.

Since a reduction of state expenditure may conflict with powerful (political and social) interests, budgetary institutions are inclined to increase revenues and thereby to accelerate inflation, even if their interest in it is not otherwise unambiguous. Inflation also increases state expenditure, non-productive investment costs more, the expenses of institutions go up, and it becomes increasingly difficult to resist pressure demanding the

raising of wages and money benefits that flow through state channels. The inflation of subsidies also increases state expenditure. Finally, the growth of state expenditure forces the budget into either increasing the deficit or increasing revenues. As a result the process gathers further momentum. From the purely state budget viewpoint it looks as if it were impossible to halt the rise in the price level. Therefore, the "central budget" actors of the economic life appear, in general, as protectors, and interpreters of inflation.

What can be done to protect the price level?

Changes in the price level, its fluctuations and upward movement are—as emphasized earlier—*phenomena*. They indicate whether *aggregate supply* and *aggregate demand* are, on the whole, in equilibrium. What has to be regulated is, therefore, aggregate supply and aggregate demand, not the price level. Since aggregate demand (wages, personal incomes, profit and depreciation allowance that can be used for investment, state grants, credits raised, export earnings etc.) always appear in the form of money (at current prices), *regulation must concentrate on the total outflow of money*. After all, demand once present if not met by supply of adequate value, can only be corrected downwards by raising the price level.

Radical measures have already been taken in Hungary to curb demand. But only a few of these were aimed at *preventing* the outflow of money (as e.g., the control of wages and earnings, or the restriction of credits to be granted to firms). The major part of the measures was rather aimed at a posterior *withdrawal* of demand that was *already present*, thus their impact was inflation-generating. (E.g. the "rearrangement" of profits using budgetary instruments, or the central raising of the consumer price level.)

The outflow of demand can be effectively regulated if demand fed *by all sources* is centrally regulated, restricted *together*, so that the outflow is linked to the expansion of supply.

At present the national economic demand flows out through channels with taps that can be closed with varying efficiency. There are even channels which have no taps, or such the permeability of which has been set for some longer time. These include, e.g., of personal incomes the monies that flow out through social insurance schemes, the wages and salaries of those employed in what is called non-productive sphere, or the export receipts of enterprises. The latter channel has been repeatedly expanded artificially, through the devaluation of the forint, that is, by raising the value of demand, while the price level of exports was actually falling abroad. We do firmly handle other taps. Such are, e.g., the outflow of wages, or credits granted to enterprises. In the last two or three years, however, we have opened the tap rather wide through which long-term loans may flow out to the public. The outflow of money to enterprises under the heading of "non-normative" state subsidy has accelerated. Even the pre-tax profits of firms have grown. (To no small extent precisely owing to the rise in the price level.)

The restriction of monetary demand was thus rather radical in some fields, while in others money flowed out controlled less and more abundantly than earlier. Taken together, this has not made the control of demand sufficiently effective before its outflow, which entailed then a rising price level and the *a posteriori* raising of taxes (levies on enterprises).

Increasing *saving* is also an effective mode of curbing demand. But a lasting and expected rise in the price level, as well as the increasing taxation of enterprise incomes prompts economic units—as has been already mentioned—to exhibit the opposite behaviour. Enterprises, the general public and central and local government bodies, naturally reasoning in terms of annual limits, equally declare that saving is not worth while, money should not be reserved for later use, but be spent as soon as possible, that is, paraphrasing the well known proverb: "Do not put off till to-morrow what you can spend today." This is not contradicted by the fact that the nominal value of saving deposits is rising: the real value of the deposits, is, however, diminishing. It is also true that the propensity to save of the general public is greater than that of enterprises. Income once acquired is not withdrawn after the event from private persons, further, there is also an element of economic coercion in savings by individuals, due to the relative scarcity of supply. The propensity to save of the general public could be stimulated in the first place by increasing the supply, and relatively stabilizing the price level of those products the acquisition of which saving is aimed at (dwellings, building sites, building materials, cars, consumers' durables). The situation is today just the reverse. The inflationary effect appears most strongly in their case.

The most disadvantageous "side effect" of the current mode of demand control (the posterior "rearrangement" of demand that has already flowed out, and the raising of the price level) is the extremely low dynamics of aggregate supply. The rate of economic growth (and the increase of real incomes at a national level) has been too low for several years in Hungary, not only in comparison to earlier times, but now already relative to several Western countries.

The expansion of aggregate supply is to no small degree hindered by the posterior "rearrangement" of demand. The *reduction* of investment, for the fifth year now, unambiguously releases such an effect. Efforts to increase supply are also weakened if it is relatively easy to make a profit by raising prices and obtaining individual government subsidies.

Restriction of aggregate demand and expansion of aggregate supply are not instruments of equal status, and, generally, they are not freely interchangeable at any time. The curbing of demand is a rapidly effective, radical and even unique method if—in view of the given structure of supply and the possibilities for its expansion—too much purchasing power flowed out earlier and if foreign resources cannot be drawn in or this is not desirable. But the curbing of demand merely "lowers the temperature" and, if applied for some longer time, it *narrows supply*; imports and investment will diminish, and the growth in personal consumption will slow down or stop. Export opportunities—first of all those of exports against convertible currency—might lead to an expansion of

production, but in Hungary, in addition to the difficulties in external markets, this is limited by the given structure of supply (the low ratio of competitive products). Greater competitiveness, however, demands additional sources (at least *somewhat more* and well placed investment, and a *little more* financial rewards for better performances). This is not secured by the macro-level control of aggregate demand. *Supply thus cannot expand without a certain encouragement of demand.* (Particularly, if we take into account that domestic demand constitutes about 88 percent of aggregate national economic demand, and exports settled in convertible currency only 6–7 percent.)

In the longer run, therefore, the expansion of supply is the basic instrument for securing equilibrium, and the control of demand has to be subordinated to it, not the other way round, i.e. not by putting a brake on supply in order to restrict demand that has already flowed out. An expanding supply, naturally, refers only to a supply that responds to the requirements of demand as regards range of choice, quality and price.

The government set as a target a small acceleration of economic growth, sufficient to be registered by the general public and the slowing down of the rise in the price level; invariably emphasizing the need to improve external equilibrium. The requirement is clear enough, but how all this is to be done, is not. The substance of the matter is that we are looking for a consistent solution. Relying on an analysis of the situation, I shall make an attempt in the following to outline an (in my opinion) possible alternative solution that aims at consistency.

1. The first and most important step is to make aggregate supply more dynamic, in the last resort, to increase the real value of net income on a national level. This objective can be better attained with a relatively stable price level and with more public support, than with the present relatively rapidly rising price level. Since a relatively stable price level is an indicator of equilibrium between aggregate demand and aggregate supply, the expansion of supply ought to be linked to more selective methods of demand control than those presently applied. This means that demand should not be expanded in advance where the conditions for expanding supply have not yet been created (e.g. building materials, building lots backed by an adequate infrastructure), or where the possibilities for expanding supply are restricted or uneconomical even in the longer run.

2. The most important field where supply should be expanded and demand restricted is what is called productive consumption that is, buying and selling between enterprises. This accounts for more than half of total sales (aggregate demand), around Ft 1500 thousand million. If the producers (enterprises) can, and, under the impact of economic coercion are compelled to, reduce material and energy costs per unit of product, then—with an identical trading volume—this part of demand will diminish, and the “final” supply, stepping outside the sphere of production, will grow. A relatively stable price level offers greater opportunities for this to happen than if the producer price level continuously and significantly rises. In this case, the cost-inflation pressure is absent, there is no brought forward demand for materials, nor does profit that derives from a rise in the price level automatically come about. Thus there will be no outflow of demand that is not covered by supply. Profit that derives from a saving of materials and energy is

based on real performance which is covered by supply once it becomes investment or wage demand.

3. In the interest of expanding supply and protecting the price level *the rate of direct taxation of enterprises* ought to be reduced. (Budgetary levies ought to be diminished.) Increasing taxation produces cost-inflation effects in enterprises which, with every justification, they pass on—if they can—to their customers. In this way they obtain additional resources (profit). If, however, we stop the process and do not increase but even reduce taxation, there will be no cost-inflation pressure, and there will be no excuse either for raising the price level. In this case profits can only be made by a real growth in performance, that is, supply will actually expand and improve. No demand will thus be effective without being backed by performance, and thus it does not have to be "rearranged" after the event. Under such conditions the profit that is made by enterprises can be the source of an expansion in production without any danger, (either if this sum is directly and immediately invested and used for technological development; or if profit is reserved, that is, held back for use in another time and place.)

4. State *expenditure* should certainly be temporarily reduced. This also becomes possible because of reduced levies since enterprises losses, also caused by increasing levies, need not be financed by later subsidies. But a reduction is also necessary in the interest of restricting the one-sided outflow of demand. Subsidies for firms and the administrative and other outlays to be financed by the state may produce demand which is not, either directly or indirectly, backed by an expansion of supply.

Among state expenditure subsidies, and, within them, non-normative subsidies should urgently be cut. (At present, precisely the opposite occurs. Normative subsidies are reduced, while demand becoming effective under the title of non-normative support is growing.) The reduction in state revenues, in taxes, may be greater than that of expenditure, even if, as a consequence, the budget runs into deficit. The limits of the deficit (its upper limit) is approved by Parliament. It is financed by bank credits, essentially by savings at the national level, the deposits of enterprises and the general public. The financing of the deficit means a withdrawal of capital from the economy. The nature and extent of capital withdrawal are, in this case, different from and smaller than at present when, through increasing levies, we reduce the net income formed at enterprises after the event. This will also produce budget revenue, that may also be used for purposes that do not improve supply.

Nevertheless, the size of budget deficit ought to be kept low, precisely in order to protect the price level. If, the central bank finances the deficit by means other than savings, the deficit will generate inflation.

5. The role and scope of movement of *monetary policy* guided by the central bank ought to be expanded. The first step would be to expand sources on which credits might be based. This can be attained by encouraging the ability and propensity to save of the firms and the general public. The rate of saving relative to outflowing demand will grow if the whole of society and the main actors in the economy can expect and trust that the

price level will not rise, or do so only slightly, and they need not fear that their savings will later be taxed away.

Thus, a relative stability of the price level unambiguously produces more advantageous conditions for larger savings than a relatively fast rising price level. A higher rate of saving may, on the one hand, restrict a low-yield and, therefore, wasteful spending of money, while, on the other hand, it increases the capital strength of the bank(s). Savings offer the bank(s) more resources for meeting demand for development projects with relatively higher returns, than if savings are taxed away by the state for good. Expanding resources—if well placed—increase the volume of supply and, as it were, provide foundations for the stabilization of the price level.

The meeting of foreign payment obligations (amortization of debts, payment of interest) is a banking task and not the duty of the state budget. This is why the bank charges a high rate of interest to firms, and restricts the credit supply to enterprises and the general public to a volume which is covered by savings of the economy—after due payment of foreign obligations and the drawing in of additional outside sources.

6. Protection of the price level itself deserves particular attention—and requires temporary measures—until supply and demand are in harmony. The raising of the price level may increase profits—and as a result also demand in the form of money if the volume of supply does not grow, or the range of choice and quality do not improve. It is known, that it is easier to make a profit by raising prices than by improving real performance.

If the control of aggregate demand already works well in the manner explained above, and supply elastically adjusts to demand, it will no longer be necessary to control the price level. However, in order that prices should be limited for both producers and traders, that is, that they can really play the role of an objective standard of measurement, central interference may temporarily become necessary as well. The Hungarian society has not got used to the economic function of prices and, in many cases, there is no way of including imports as a factor in supply equal to domestic production. We have got used to a situation where buyers and consumers are at the mercy of sellers. Sellers experience that if they keep prices high, this is enough for them, or it even earns them higher profits than if they produced more. It seems as if the Hungarian public accepted life in an "economy of shortages", although this is not in the least justified by the level of economic development attained. The "free" shaping of fruit and vegetables prices, or of dwellings, which has been so much objected to, and with justification, indicates that the price level must be protected in Hungary, at least for the time being, also by central interference.

Protection of the price level must not mean the freezing of individual prices, nor that the scope of administrative price fixing should be extended. Producers may modify the prices of individual products and services, provided that the modification is justified by disproportions between demand and supply. But "modification" must not mean a unidirectional upward movement: the prices of products for which there is no demand or demand slackens at the prevailing prices, should be reduced from time to time. The

lowest limit to price reduction is the price at which the product can be exported (export is real demand). The upper limit to the price of a product is the import price, because supply can be expanded at that price. While prices move between these two limits, there is, in principle, no need for central interference. If, however, domestic supply can only be expanded at a higher price than that at which the user could import the product, but, for equilibrium reasons, imports cannot take place, then the control by market surveillance and the price authority appears justified.

Control may be exercised in a way that the price higher than the import price is permitted for a limited time for defined products, or that imports of the given product are licensed, that is, outside competition is supported. Import prices as upper price limits are not fictitious, but very real, objective measuring rods. If we force domestic users (productive firms) to pay higher prices for the products used by them (materials, intermediary products, components and even investment goods) for some longer period than the import price—that is, the price at which competitors may buy the same product, they can hardly be competitive on foreign markets.

Protecting the price level is necessary in the future as well, in the sense that it ought to be and could be made an economic policy requirement to establish to what extent the producer and the consumer price levels can grow (more slowly than in recent years). If equilibrium were still restored only at a higher price level, this would be an indication that the instruments for generating supply and restricting demand have been incorrectly chosen. They would therefore need some modification.

Some concluding remarks

The steps proposed for livening up economic growth and for slowing down the rise in the price level only outline directions and, naturally are not mature solutions ready for implementation. Theories and proposition are simplifications, life may give rise to much more complex problems, and the solutions may become sources of new conflicts. But all that should not be an obstacle to our striving to approach the already known problems, in ways that differ from the current ones, but in the spirit of the principles adopted for the improvement of economic control.

The proposals outlined above will certainly give rise to doubts amongst economists. Two kinds are certain to emerge:

Firstly: is a given acceleration of growth possible without a deterioration in the trade settled in convertible currencies?

Secondly: if investment is somewhat boosted, will the danger of arbitrary decisions not increase, that is, will inefficient investments not be made on a larger scale than at present?

These doubts would be justified if we assumed that neither the production structure of the economy, nor the decision taking mechanism of investment would change. But the import-intensity of production is not a law of nature. The improvement

of the system of economic control is aimed precisely at increasing the value added per unit of imports, that is, domestic performance which becomes effective in exports. The latter may also be promoted by measures which force prices between international standard limits and bring the operational conditions of domestic enterprises (e.g. their tax and interest burdens) closer to those of enterprises against which they have to hold their own in international competition.

As regards investment, arbitrariness does not menace because more could perhaps be invested. Scarce investment opportunities may be used inefficiently. The danger of run-away investment would grow if the central, sectoral or local supervisory agencies continued to take individual investment decisions in physical terms in the future as well, and then automatically secured the necessary resources independent of the actual final costs or the returns it really produces. All that can, however, be prevented, or the danger can be diminished, if sufficiently strict, but not unrealistically high return requirements are raised towards productive investment projects—financed either by enterprise funds, or by the use of credits, or by allocated central resources—and the investor is called to account for the returns to the agency financing the project once the investment is implemented.

* * *

For long years we have regularly and repeatedly, correctly and unambiguously, insisted that requirements be met by every actor of the economy. For instance that

- those working should give the best of their abilities as producers;
- those handling social property should use the assets entrusted to them (should operate them, place them etc. most effectively);
- enterprises should exploit the capacities operated by them optimally and thus raise the value of supply relative to inputs.

Yet these requirements are not satisfied, or not to the desired extent. The task is to produce conditions which will make it feasible and necessary to demand positive behaviour on the part of the actors of the economy. What has to be attained is that the activity of those should be crowned with success, who act in conformity with these requirements. All that can be more easily secured with an expanding supply, while preventing unbacked demand, consequently, with a relatively small rise in the price level, than if the opposite occurred.

It is not the business of economists to explain why we have to learn to live with inflation, and why slow economic growth is necessary, but to work out proposals for ways securing a relatively stable price level indicating economic equilibrium, and for the dynamic growth of the Hungarian economy

ЗАЩИТА УРОВНЯ ЦЕН И ДИНАМИЗАЦИЯ ЭКОНОМИКИ

Ю. ЗАЛА

В статье дается попытка ответить на вопрос, что вызвало в Венгрии явление ускорения роста уровня цен, негативно расцениваемое обществом, и связано ли это обстоятельство с замедлением экономического роста.

В первой части статьи анализируются события прошедших 14 лет (1970—1984 гг.) и показывается, что за этот период уровень венгерских розничных цен возрос почти в такой же мере (в два раза), как и в наиболее развитых промышленных странах, с той разницей, что если в других странах — под влиянием взрыва цен на энергию — большая часть роста цен приходилась на первую половину этого периода, то в Венгрии этот процесс запоздал и произошел во второй половине периода. Вначале рост уровня цен замедлило привлечение внешних ресурсов. В 1978 г. 9,1% валового национального продукта составляли внешние источники, а в 1984 г. уже 3,5% валового национального продукта направлялось на внешнее использование ВНП.

Автор констатирует, что повышение уровня цен было необходимо для того, чтобы избежать количественного дефицита, однако теперь этот процесс следует замедлить.

Уровень цен отражает сбалансированность или несбалансированность платежеспособного спроса и предложения. Относительную стабильность уровня цен теперь необходимо в первую очередь обеспечивать с помощью расширения предложения, а не за счет одностороннего ограничения спроса. Небольшое ускорение экономического роста, таким образом, послужит и относительной стабильности уровня цен.

ECONOMIC REFORM, ALLOCATIVE EFFICIENCY, AND TERMS OF TRADE

E. ZALAI

It has widely been agreed that the distorted price system is one of the causes of inefficient economic decisions in centrally planned economies. The paper investigates the possible effect of a price reform on the allocation of resources in a situation where micro-efficiency remains unchanged. Foreign trade and endogenously induced terms-of-trade changes are focal points in the multisectoral applied general equilibrium analysis.

Special attention is paid to some methodological problems connected to the representation of foreign trade in such models. The adoption of Armington's assumption leads to an export demand function and this in turn gives rise to the question of optimal export structure, **different** from the equilibrium one—an aspect so far neglected in the related literature.

The results show, that the applied model allows for a more flexible handling of the overspecialization problem, than the linear programming models. It also becomes evident that the use of export demand functions brings unwanted terms-of-trade changes into the model, to be avoided by a suitable reformulation of the model.

The analysis also suggests, that a price reform alone does not significantly increase global economic efficiency. Thus the effect of an economic reform on micro-efficiency appears to be a more crucial factor. The author raises in conclusion some rather general questions related to the foreign trade practice of small open economies.

Introduction

This paper reports about a theoretical and methodological research, in which some issues related to the economic reform concepts in the centrally planned economies are addressed in the framework of a computable general equilibrium model. It should be emphasized right at the beginning that the analysis only focuses on some aspects of economic reform and, despite its quantitative nature, the conclusions arrived at are qualitative ones. Apart from the reform ideas special attention is paid to some methodological problems of foreign trade and its representation in applied general equilibrium models. Foreign trade will be, in general, a focal point in our analysis of changing resource allocation patterns under various assumptions.

Ideas for economic reform in Eastern Europe have in recent years developed through several stages; nevertheless, some basic elements have remained practically unchanged. Among the latter is the establishment of economically more sound price systems, and increased role of prices in economic decisions, both at the central (macro) and the enterprise (micro) level, and a simultaneous decentralization of decision making.

It has been long argued and also a widely accepted view that one of the main causes of inefficient economic decisions in centrally planned economies is the distorted price system. Prices misinform and misguide economic decisions at both the macro- (central planning) and the micro- (enterprise) level. These views were especially typical of earlier stages in the formulation of reform concepts, but various price reforms and price modeling efforts indicate that this issue still is quite in the forefront of interest (see, for example, [10, 11, 9, 3, 2]). We will revisit this issue.

The various suggestions for economic reform have rarely been based on a rigorously developed economic theoretical framework. It is, however, probably fair to say that in most cases they have relied on some intuitive model of perfect competition stimulated by individual or group financial/material interest. Hence, we believe that the adoption of a competitive general equilibrium model framework for the analysis of expected outcomes of economic reform measures is justified.

Since we are dealing with an open economy, special attention is paid to foreign trade and the possible effects of trade-liberalization policies, especially on the export side. Many observers inside and outside Hungary assert that, because of surviving institutional rigidities and worsening external trade conditions, the economic reform did not produce satisfactory results at the micro- (enterprise)-level. The enterprises failed to modernize their product-mix to a sufficient extent and, consequently, the increase in productivity and competitiveness on foreign and domestic markets was smaller than had been expected. In such conditions one may realistically assume that changes in the export volume, even in a small economy like Hungary, are accompanied by, what will be called, endogenously-induced changes in the terms-of-trade.

Thus, in our analysis attention will be focused on rather specific problems. Within the usual comparative static framework we will evaluate the expected impact of a price reform on the allocation of resources and the resulting gains in economic efficiency. Comparative static analysis involves the basic assumption that the underlying structure of the economy (for example, technological conditions and consumer preferences) remains unchanged. This critical feature of the analysis will assume a special meaning in our case. The most plausible interpretation is that efficiency at the micro-level does not change significantly, which is in line with the above remarks. Changes in prices will thus only affect the allocation of resources among sectors and foreign trade (allocative efficiency). Our simulation results suggest that, under such conditions, one can only expect modest results, especially if one accounts for endogenously-induced deteriorations in the terms-of-trade.

As mentioned above, we employ here a model of the computable general equilibrium type to assess repercussions of the assumed changes in a consistent manner. The basic assumption is that changes in relative prices and costs will be followed by appropriate shifts in the composition of inputs, outputs, consumption and trade, following the rules of a laissez-faire market equilibrium. While the model is intended to capture some elements of the working of an economic or planning system in which prices and market considerations play some albeit limited role, it should not and cannot be

regarded as a fully adequate, descriptive model of the Hungarian or any other real economy. Our basic aim is to test various reform concepts under the conditions outlined above. We will show that, contrary to some common beliefs, moving closer to a market equilibrium does not necessarily improve Pareto efficiency. The increase in allocative efficiency will be reduced and may even be completely offset by an endogenously-induced terms-of-trade deterioration. The optimum tariff argument suggests that in such cases it might be advantageous to keep some central control over export decisions, since individual exporters may not perceive (or it may not be in their interest to account for) this scale effect.

Finally, the paper also addresses a more general, methodological issue concerning computable general equilibrium modeling. This is the question of the treatment of foreign trade in general, and the so-called Armington assumption in particular. The numerical examples presented will illustrate the effect of alternative assumptions regarding export functions and the size of export elasticities. It will be argued that the export demand functions and values of elasticities frequently adopted introduce unwanted and unreasonable terms-of-trade effects into the analysis, and these effects should and can be avoided.

The model: an outline

Instead of presenting a complete mathematical statement of the model, we will give an informal, brief outline for the sake of readers less interested in mathematical formulas.* In most of its elements the model follows quite closely what may already be called a "traditional" computable general equilibrium approach. Models of this type have been developed during the past decade in various places for economic policy analyses. Some representative examples are [14; 7; 8; 15; 18]. In this outline we will also comment on some less traditional features of our model, which distinguish it from related models developed elsewhere. The model employed here was developed by the author, in close cooperation with colleagues in the Hungarian National Planning Office. A more elaborate discussion of it can be found in [19; 8; 20].

Commodities in the model represent sectoral outputs and, according to one fairly common statistical classification in Hungary, 19 sectors are distinguished. Commodities are further classified into three categories: domestically produced ones, and competitive and non-competitive imports. Both imports and exports are also classified in terms of dollar and rouble trading areas, which results in a fairly detailed foreign trade structure. Rouble trade in this version of the model is exogenously given, reflecting the fact that rouble trade flows are fixed, as a rule, by five-year bilateral agreements and thus are relatively inflexible over the short term. Exports and competitive imports are treated as perfect substitutes for domestic products. This treatment, especially in the case of imports, is a departure from the traditional, neoclassical general equilibrium models, in which imports are usually treated as imperfect substitutes. Nevertheless, we employ formally similar, relative price-dependent import share functions, as in the more

*Interested readers can find a complete description of the model in [21].

traditional models, which can be derived on the basis of cost-minimization assumptions and a CES-type substitution function. Our rationale for using these import share functions is, however, different from the neoclassical one (which assumes imperfect substitutability and perfect adjustment). They are intended to simply reflect limited (probably imperfect) adjustments to relative price changes, which may be caused by a variety of factors. (It should be mentioned, though, that the numerical results are not much affected by this change in treatment.) As a result, we have two sets of balance equations for the sectoral commodities: one combined balance for domestically produced goods plus competitive imports, and one for the non-competitive imports.

Total use of commodities is split up between production, investment, consumption, and export (if applicable). Use in production and investment is determined through fixed input-output coefficients (Leontief technology). Consumption is treated in a special way, which can be viewed as a generalization of the frequently used Linear Expenditure System (LES). Total consumption is made up of a fixed part (identified here with the base consumption) and a variable part (excess consumption). The structure of the latter is fixed (a Leontief or Kantorovich type of preference function), thus leaving only the level of excess consumption to vary. This makes the implicit objective (welfare) function similar to those employed in some linear planning models. Another special advantage of this formulation is that it allows us to measure welfare changes in a conceptually very simple way.

Gross investment is defined as the sum of replacement and new investment. The former is determined by the variable sectoral capital stocks and fixed replacement coefficients, which are different from the depreciation rates. The amount of new (net) investment is exogenously given in this version of the model. Labor and capital are undifferentiated with respect to their sectoral use; they are assumed to be freely mobile across sectors. The uses of labour and capital in production are specified by Cobb-Douglas production capacity functions (which results in a Johansen-type production technology). Sectors are assumed to minimize the joint cost of labour and capital used. Total available labour and capital are held constant and assumed to be fully utilized.

The rest of the foreign trade relations are modeled as follows. Since rouble trade flows are fixed, we only have one balance-of-payment (current account) constraint in the model on dollar trade. The target deficit level is fixed in the model. Dollar exports are assumed to adjust to relative (domestic/foreign) price changes and the size of shifts is determined by fixed elasticity coefficients.* We employ the following form

$$Z_{id} = Z_{id}^0 \left(\frac{P_i}{\tau_i v_d P_{id}^{VE}} \right)^{\epsilon_{id}}$$

*In two sectors (foreign trade and waterworks) we held export constant. In the first case because of accounting problems (some part of export earning is accounted in the foreign trade sector and, as a result, it shows up as if it were an independent and very profitable exporting activity), and in the second case because of its negligible role and inelastic nature.

where Z_{id} is the base volume of export, ϵ_{id} the constant elasticity parameter, τ_i is an export tariff factor (different from 1 only in the optimal tariff calculations), P_i is the domestic price, V_d the dollar exchange rate and P_{id}^{WE} a constant world market price.

The above form can be given three different interpretations. If P_{id}^{WE} is interpreted as the price of competitors and P_i/V_d (forgetting about the tariff factor for the moment) as the export price of the domestically produced good (i.e. its dollar price in the balance of payment, P^E), then we deal with a usual export demand function. Such a formulation is traditionally supported by Armington's assumption [1] about regional product differentiation and leads to a downward-sloping export demand function. Conversely it means that the export price is assumed to change with the volume of export. This is a tenable assumption even in the case of a "small" country, but leads to some problems seldom addressed in applied models.

If we regard P_{id}^{WE} as the fixed dollar export price of the home products (small country assumption), the above export function can be interpreted as an export supply function. Note, that these two interpretations are completely asymmetric in the sense that in the first case perfectly elastic supply and imperfectly elastic demand is assumed, whereas in the second case just the opposite. This observation quite naturally leads to a third interpretation, in which both supply and demand are assumed to be imperfectly elastic. Thus, we may assume that we have two export functions (with different sizes of elasticity, as a rule), one for demand and one for supply. If we solve them for their equilibrium value, we shall again arrive at the same form as above, in which the equilibrium elasticity and the dollar export price is determined as follows* (for the sake of simplicity some indices omitted).

$$\epsilon = \frac{\alpha \beta}{\alpha + \beta}$$

$$P^E = \left(\frac{P}{V} \right)^{\frac{\alpha}{\alpha + \beta}} P_{WE}^{\frac{\beta}{\alpha + \beta}} = \left(\frac{Z}{Z^0} \right)^{1/\beta} P_{WE}$$

where α and β are the supply and demand elasticities, respectively. We only utilize the first two interpretations in our calculations, but we will come back to the question of alternative forms during the discussion of the results.

Now we turn to the description of the equilibrium pricing rules. As a basic principle we have tried to follow as closely as possible the so-called two-channel, normative price formation rule, discussed extensively in the literature related to price reform ideas (see, for example, [6]). Equilibrium (domestic producers') prices are, thus, defined as the sum

*See [20] for a more elaborate discussion of this point.

of unit material costs, depreciation, wages, and uniformly determined (normative) returns on labour and capital. The normative rates of return on labour and net capital are determined endogenously as equilibrium rates (factor clearing prices). The domestic price of dollar imports is determined through their world market price and the equilibrium exchange rate. The domestic prices of rouble imports (since they are fixed) need special treatment. In the non-competitive sphere it is assumed to move in proportion to the price of dollar non-competitive imports, whereas in the competitive sphere it varies proportionally to the average price level of the substitutes. And, finally, since we do not record how large the share of inputs from various sources is in different uses, the same average sectoral prices are used to evaluate the composite input in each area of use.

The simulation framework and data

The data* for the model presented in the previous sections were mostly obtained from the 1976 official statistical input-output table of the Hungarian economy [5]. Where direct observations were not available we had to rely on expert estimates or various rather ad hoc methods. Thus, for example, there is no published information available on the area composition of exports and imports. The corresponding data in the model are, therefore, only rough estimates. Similarly, the initial dollar export prices (expressed in domestic currency units) were also estimated using indirect methods. The division of imports into competitive and non-competitive parts was derived from more detailed (product group) investigation based on expert estimates.

The assignment of values to the parameters occurring in the technological and behavioural relationship constitutes a very frequently encountered problem. Available econometric estimates are scarce and very unreliable. We have followed the rather common calibration procedure (see, for example, [16]), in which most of these parameters are "guesstimated" on the basis of available literature and qualitative judgements, combined with single data point estimates. These latter are derived by assuming the initial (base) state of the economy to be, at least partially, one of equilibrium. In this way, the model specification is capable of reproducing the initial position of the economy and comparative static exercises can be performed. *Table 1* contains some of the major indicators of the Hungarian economy in 1976 and also a few crucial model parameters.

The specification of and elasticities in the export relationships deserve special attention here, because the sensitivity of the results with respect to these factors is one of the major concerns of this paper. The main role of the export function is to allow some limited shift in the volume of exports in various sectors, if relative (foreign/domestic) prices change. In linear programming models of resource allocation the same goal (i.e.,

*The author wishes to acknowledge the invaluable assistance of Gy. Boda and F. Hennel in supplying appropriate data for the model.

Table 1
Sectoral characteristics of production, export and import (percentage shares),
and trade elasticity parameters

Sector	Share in production	Export/ production	\$ Export/ production*	Export elasticity*	Import/ domestic source	\$ Competitive import domestic source*	Import elasticity*	Net income shares**
1. Mining	2.27	3.63	0.84	-2.00	74.63	18.54	0.50	0.250
2. Electricity	1.76	1.63	1.01	-3.00	10.34	0.	-	0.068
3. Metallurgy	4.91	33.01	23.00	-2.50	47.91	7.67	0.50	0.141
4. Engineering	13.44	43.55	13.24	-2.50	80.14	2.12	0.30	0.282
5. Construction materials	1.63	12.29	7.91	-2.50	25.02	3.53	0.30	0.203
6. Chemicals	7.83	20.24	13.05	-2.50	49.18	11.67	0.50	0.301
7. Light industries	8.97	26.81	13.82	-2.50	26.16	7.93	1.25	0.230
8. Other manufacturing	1.11	8.98	4.82	-2.50	4.28	0.	1.25	0.128
9. Food processing	9.96	19.40	13.04	-2.00	15.75	7.05	1.25	0.061
10. Construction	8.20	0.54	0.15	-2.50	0.	0.	-	0.191
11. Agriculture	15.75	12.14	7.79	-2.00	4.62	0.79	2.00	-0.058
12. Forestry and logging	0.60	15.10	14.99	-2.50	26.95	8.66	0.50	0.119
13. Transport and communications	5.31	8.31	5.39	-2.50	4.42	0.	0.30	0.067
14. Domestic trade	6.06	2.76	2.24	-1.25	0.	0.	-	0.533
15. Foreign trade	1.60	26.78	9.97	0.	24.04	2.07	0.30	1.058
16. Waterworks	0.90	0.80	0.02	0.	0.	0.	-	-0.247
17. Personal and economic services	2.98	0.	0.	-	0.	0.	-	-0.271
18. Health and cultural services	3.63	0.	0.	-	0.	0.	-	-0.160
19. Public administration	3.06	0.	0.	-	0.	0.	-	-0.115
Total	100.00	16.90	8.60		20.70	3.45		

*Hypothetical data.

**Uniform rate of return (tax) on wages (30 percent) and on net capital (5 percent) assumed.

allowing for some, but not complete, specialization) is achieved by the use of individual bounds on export activities. Here, in the case of relative price dependent export functions, the larger the elasticities of these functions, the larger the scope for taking advantage of international specialization. If, however, they are interpreted as export demand functions, which is often the case, then the foreign price of the exported goods is dependent on their volume. The smaller the elasticities, the larger the size effect of the export volume on prices. The usual size of these elasticities is relatively small (-3 ; -1.5) both in the available literature on econometric estimates (13; 17; 4), and in the CGE models using such specifications. These small elasticities, however, imply that endogenously-induced terms-of-trade effects will be rather large, which may be hard to justify on empirical grounds. It will, therefore, be interesting to see how the size of the export elasticities influence the solution of the model. To this end we have repeated each simulation after doubling the size of the initial export elasticities.

Also, beside the pure export demand specification, we have run the model with two alternative variants. The first of these can be tentatively interpreted as an export supply specification. In this run we assume that the volume of export has no effect on the export price, i.e., that the price is dictated by the world market; other than this, we use the same export functions. In the second case, we have tried to calculate a solution corresponding to the logic of a programming model or, using a term familiar in international trade theory, to an optimal tariff situation. In this run we assume that the terms-of-trade effects are real, but that they are not perceived by the atomistic exporters. We wanted to see how the planners' optimum (in which the country takes advantage of this market "power" in international trade) would differ from the laissez-faire equilibrium (the first case). To obtain the exact results would in general require the solution of a relatively large nonlinear programming problem. Since, however, our model is rather close to a neoclassical formulation, we can approximate this solution by introducing appropriate optimum tariffs into the determination of export revenues (for the analytical and theoretical underpinnings of this approach, see [20]).

Thus, in effect, we shall present six runs in total, which differ partly in terms of export specification (pure demand, supply, and optimum tariff) and partly in terms of the size of the export elasticities.

As indicated earlier, the major thrust of our simulation effort is to estimate the impact of a price reform on the economy, if the relative price changes were followed by appropriate reallocation of resources, including foreign trade settled in dollars. In order to do this we assume that the initial state of the economy is "almost" a general equilibrium one, in which the only major distortion manifests itself in the price system. That is, individual decisions are viewed as roughly economically rational, except that they are based on incorrect price information. (As can be seen in *Table 1*, sectoral prices include rather different net incomes (profits) in different sectors.) The above assumption is admittedly very bold, though not inconsistent with some (especially earlier) Hungarian reform ideas. More realistic assumption would require qualitatively different model specifications, for which, for the time being, both theoretical and empirical bases are lacking.

Thus our model, with a slight change in its specification, reproduces the 1976 situation of the Hungarian economy. The change is in the price formation rule. Prices in the base case equal costs, which also include normative net incomes (close to 30 percent on wages and 5 percent on net capital value in 1976), "marked-up" by fixed, but sectorally different profit rates. In the various runs we calculate the effect of the abolition of these profit mark-ups, i.e., the effect of a price reform, where prices are formed according to the principle of uniform (normative) return requirements. The optimum tariff calculation includes, in addition, taxes on exports, which distinguishes it from the other two specifications.

The simulation results

Table 2 contains the sectoral producers' price indices calculated in the various runs. These may be of special interest, because there are a number of published studies that have calculated normative prices on the basis of input-output tables both in Hungary and elsewhere (see 10; 3; 2). These studies have used a somewhat different methodology; for example, in most cases they rely on exogenously-defined normative return rates on labour and capital. Even where they are endogenous (as in the case of [2]), the method followed is different (a closed Leontief model). What makes our model clearly distinguishable from the previous ones is that some of the input coefficients themselves (like those of labour and capital) change in response to price changes and the (domestic/import) compositions of inputs changes too.

In spite of these and other differences in methodology, data, or time period studied, our results show remarkable similarity to those of previous calculations. There are striking similarities, not only in general tendencies, such as disproportionality between global industrial, agricultural, and service price levels, but also in the rank order of sectors according to their normative price level. Comparing the different runs one can see that the price indices in four runs (demand and supply with both sets of elasticities) are practically the same; only the optimum tariff solution results in somewhat different prices, especially in the case of low elasticities. This difference can be clearly traced back to the imported input components and to variations in the dollar exchange rate. The latter decreases from its base level by about 20–25 percent in the four runs mentioned above, whereas in the optimum tariff runs it stays basically the same with high elasticities and increases by nearly 35 percent with low elasticities (see *Table 3*).

One may wonder why the model suggests revaluation rather than devaluation of the Hungarian currency, at least in the pure equilibrium solutions: this seems at first sight in marked contrast with what conventional wisdom would suggest in the case of Hungary. The explanation is in fact rather simple: it is due to the decrease of price level in the major exporting sectors. If the exchange rate remained unchanged or increased, it would, in general, result in growing exports and decreasing imports, and it would thus violate the trade balance condition. Therefore, the exchange rate has to drop accordingly. Even in

Table 2
Producers' price indices in various runs

Sector	Low elasticities			High elasticities		
	Demand	Supply	Optimum tariff	Demand	Supply	Optimum tariff
1. Mining	81.16	81.28	79.03	81.37	81.45	80.32
2. Electricity	86.99	87.07	86.42	87.17	87.23	86.79
3. Metallurgy	74.28	73.82	85.23	73.52	73.24	77.85
4. Engineering	67.96	67.77	72.68	67.63	67.51	69.43
5. Construction materials	79.40	79.40	80.18	79.41	79.42	79.57
6. Chemicals	65.21	64.66	77.89	64.30	63.98	69.37
7. Light industries	70.22	69.95	76.46	69.74	69.57	72.25
8. Other manufacturing	86.89	86.99	84.55	87.02	87.08	85.98
9. Food processing	95.73	95.62	97.66	95.53	95.46	96.38
10. Construction	80.80	80.86	79.66	80.88	80.92	80.29
11. Agriculture	111.39	111.57	107.23	111.67	111.78	109.90
12. Forestry and logging	89.04	89.18	85.96	89.26	89.34	87.93
13. Transport and communications	99.89	100.20	94.87	100.44	100.65	98.07
14. Domestic trade	70.31	70.54	65.25	70.69	70.83	68.53
15. Foreign trade	46.94	46.65	53.94	46.45	46.27	49.19
16. Waterworks	155.33	156.39	136.36	157.26	157.97	148.87
17. Personal and economic services	162.88	164.13	140.32	165.17	166.01	155.23
18. Health and cultural services	128.83	129.34	118.06	129.67	129.98	125.05
19. Public administration	118.75	118.85	117.11	118.90	118.96	117.96

this situation, total trade turnover increases and, as expected, relatively more so in the case of higher export elasticities. It is also interesting to see that the increase of exports is larger in the demand than in the supply runs, because in the former increased exports have to make up for the terms-of-trade deterioration (total imports increase at more or less the same rate in the two types of run).

The optimum tariff cases produce results that are qualitatively different from the other four variants and also from each other in the cases of higher and lower elasticities. Lower elasticities imply stronger international market power, the exploitation of which

Table 3
Main indicators (aggregate indices at base prices): First model

Indicator	Low elasticities				High elasticities		
	Base	Demand	Supply	Optimum tariff	Demand	Supply	Optimum tariff
GNP	100.00	102.04	101.58	100.58	103.06	102.42	102.37
GDP	100.00	102.11	101.77	100.91	103.27	102.75	102.66
Final consumption	100.00	99.91	101.52	102.68	100.37	102.28	101.03
Excess consumption	0.00	-369.89	5505.71	9730.08	1323.46	8290.52	3711.55
Dollar terms of trade	100.00	93.20	100.00	104.98	92.65	100.00	94.95
Total trade/GDP ratio	81.10	83.97	82.91	76.66	85.73	84.20	82.07
Total export	100.00	108.40	104.96	94.29	112.95	108.24	106.35
Total import	100.00	103.09	103.13	96.47	105.44	105.14	101.46
Total competitive import	100.00	102.16	103.37	85.09	104.97	105.70	94.94
Total non-competitive import	100.00	103.50	103.02	101.50	105.64	104.89	104.34
Total dollar import	100.00	106.03	106.11	93.11	110.62	110.04	102.85
Total dollar export	100.00	116.51	109.74	88.78	125.44	116.20	112.48
Dollar exchange rate	100.00	80.87	78.53	134.54	76.95	75.52	98.46
Return rate of wages	0.30	0.57	0.58	0.36	0.59	0.59	0.50
Return rate on capital	0.05	0.10	0.10	0.06	0.10	0.10	0.09

results in reduced trade volume and improved terms of trade (see *Table 3*). Thus, quite apart from the increased allocative efficiency, additional welfare gains result from the improving terms of trade. The increased dollar exchange rate (close to a 35 percent devaluation) makes imports decrease. If there were no tariffs on exports, they would increase significantly because of the high exchange rate. The tariffs offset this impetus. The large difference between the exchange rates in the case of pure demand and the optimum tariff run clearly indicates that the tariffs are quite large. Indeed, their size varies between 60 and 100 percent, depending on the size of the export demand elasticity.

When elasticities are higher, the scope for increasing allocative efficiency becomes larger, whereas the terms-of-trade effects become significantly smaller. In fact, it proves to be advantageous to utilize the reallocation possibilities even to the extent where the general level of the terms of trade actually deteriorates. The size of the tariffs becomes, of course, much smaller in this case (20–35 percent) and, as a result of these interacting forces, the exchange rate remains practically unchanged.

Readers interested in more detailed results of the simulation runs can find additional tables in [21]. These include percentage changes in dollar exports and competitive imports in different sectors, and the price terms that explain the direction of change in dollar exports and competitive import shares, as well as detailed statistics on changes in production and on employment of the two primary resources, labour and

capital. The analysis of these data is left out of this paper. In the remaining part of the paper we will restrict ourselves to an analysis of various general features of our results and draw some broad conclusions on the basis of the summary *Table 3*.

The main aggregates measuring the output level of the national economy, gross (total) national production as well as GDP, show only a modest increase resulting from the reallocation of resources. This is a common phenomenon frequently encountered in similar resource allocation exercises. More significant changes can naturally be seen in the export and import activities. Except for one case, our calculations interestingly reproduce the historical observation that imports grow faster than output. This is a direct consequence of increased international specialization. As one can see, the measure of the openness of the economy, total trade/GDP increases in all cases but one. The exception is the optimum tariff solution with low elasticities, which suggests that more specialization and increased foreign trade need not necessarily be beneficial for an economy. As we know, this is the case where export prices react rather sensitively to changes in export volumes.

One surprising result of our numerical simulations may be that in one of the runs the move toward a perfect equilibrium situation from a distorted one results in a welfare loss. However, this may only be surprising because we tend to associate competitive equilibrium with Pareto optimality. This is, however, not the case when the economy is open and faces imperfectly elastic export demand. In such a situation the optimal policy is a kind of monopolistic rather than pure competitive equilibrium, as is known from the theory of optimum tariff. This solution is approximated, as indicated earlier, by the optimum tariff run. As we can see, the difference in terms of welfare between the pure competitive (*laissez-faire*) and the optimum tariff (planners' optimum) solutions is close to three percent of total consumption.

We can further characterize the trade-off possibility between allocative efficiency and terms-of-trade efficiency by means of the supply run. This latter approximates the potential allocative efficiency gain, i.e., the gain that would be achieved in the absence of terms-of-trade changes. As we can see, this potential allocative efficiency gain, at low elasticities, is approximately 1.5 percent of total consumption. In the demand run, the global efficiency has decreased by about 0.1 percent, which means about 1.6 percent loss in efficiency due to the endogenously induced terms-of-trade changes. The optimum tariff run, at the same time, can exploit this efficiency potential to a large degree and increases total efficiency by about 2.7 percent. These results, of course, depend on the sizes of elasticities. With larger elasticities we can see the following picture. At constant export prices the allocative efficiency gain is about 2.3 percent and when these prices change, the loss due to the terms-of-trade deterioration is about 1.9. In this case the optimum tariff solution results also in terms-of-trade losses of about 1.3 percent. Needless to say, these numbers only serve here for illustrative purposes.

Most of our analysis so far has been concerned with the usual low elasticity case. As we have seen, the terms-of-trade effects brought into the numerical simulation through the downward-sloping export demand functions are quite significant, and seem to be

quite unrealistic. The same runs repeated with the sizes of these elasticities doubled clearly exemplify the dilemma that the builders of computable general equilibrium models face. Larger elasticities will significantly increase the resource reallocation possibilities and reduce the effect of the terms-of-trade changes. Thus, for example, even in the optimum tariff run, it proves to be advantageous to utilize the resource reallocation potential, even to the extent of incurring a deterioration in the terms of trade. As can be seen, the laissez-faire and planners' optimum solutions do not differ so much as in the previous case. These solutions can, however, be criticized because they allow for unrealistically large shifts in the allocation of resources, primarily in exports.

One may believe that our results, especially the welfare loss occurring after a shift toward equilibrium, have to do with our departure from neoclassical assumptions. The consumption structure is fixed, and thus adjustment on the consumers' part is excluded. Also, as mentioned, import share changes are treated in a non-neoclassical fashion. It is, therefore, interesting to check how sensitive the simulation results are to these changes. To this end we repeated our exercise with a model strictly in line with neoclassical assumptions. In these runs imports were treated as imperfect substitutes and the usual cost minimization assumption was invoked. In the case of consumption we assumed that five percent of total consumption can be readjusted to changing prices in accordance with a Cobb-Douglas-type utility function. Thus we employed an LES-type demand structure. The main indicators of these runs are summarized in *Table 4*. They clearly indicate that the results are qualitatively the same, and even the quantitative differences are negligible.

Table 4
Main indicators (aggregate indices at base prices): Second model

Indicator	Low elasticities				High elasticities		
	Base	Demand	Supply	Optimum tariff	Demand	Supply	Optimum tariff
GNP	100.00	102.35	101.95	100.98	103.41	102.86	102.70
GDP	100.00	102.33	102.05	100.93	103.51	103.09	102.87
Final consumption	100.00	100.00	101.87	102.56	100.56	102.68	101.23
Excess consumption	0.00	-138.99	6628.84	8657.70	1843.16	9563.94	4340.64
Dollar terms of trade	100.00	92.77	100.00	104.59	92.44	100.00	94.79
Total trade/GDP ratio	81.10	84.16	83.04	76.90	85.95	84.40	82.21
Total export	100.00	109.05	105.45	94.70	113.62	108.90	106.83
Total import	100.00	103.38	103.54	96.69	105.84	105.69	101.77
Total competitive import	100.00	102.25	103.62	85.37	105.24	106.11	95.20
Total dollar import	100.00	106.61	106.92	93.55	111.41	111.11	103.46
Total non-competitive import	100.00	103.88	103.51	101.69	106.11	105.50	104.68
Total dollar export	100.00	117.78	110.70	89.60	126.75	117.49	113.43
Dollar exchange rate	100.00	81.58	79.24	136.06	77.44	76.12	99.11
Return rate on wages	0.30	0.58	0.59	0.35	0.59	0.60	0.50
Return rate on capital	0.05	0.10	0.10	0.06	0.10	0.10	0.08

Concluding remarks

Before we draw the main conclusions and formulate some open questions, we would like to highlight the essence of the adopted method of analysis. Approaching from the traditional input-output modelling direction we might characterize our model as a linked system of a physical and a price input-output model. Prices are assumed to affect some parameters traditionally treated as constant, which are thus variable¹ in our interlinked models. From the point of view of the more traditional linear programming models of resource allocation our model can be regarded as a nonlinear programming model, in which some of the shadow price formation rules are substituted by more realistic ones.

The above interpretation, we believe, is a more correct description of the real nature of these macroeconomic models, than the underlying essentially microeconomic theory of general equilibrium. This theory is regarded completely alien to socialist (centrally planned) economies and this explains why applied general equilibrium models are missing from the analytical tools of economists in those countries. One of the aims of our study was to show an example that these multisectoral models have potential advantages over the traditionally used models, especially in addressing issues related to economic reform ideas.

A common weak point of the mutisectoral models of resource allocation is their tendency to produce overspecialized solutions. In the linear programming models overspecialization is avoided by the use of various ad hoc constraints on either some individual or certain groups of variables. In the applied general equilibrium models the same effect is achieved by the introduction of various imperfect substitution schemes. The real advantage of this solution is that it results in more meaningful shadow (equilibrium) prices. The example of the export demand functions shows us however, that this solution may result in some unwanted features, which have not been discussed in the related literature.

We may conclude from our analysis that in computable general equilibrium models it seems crucial to distinguish and separate the envisaged changes in the export prices (terms of trade) from those in the speed of export adjustment. One crude and pragmatic solution might be to use one set of relatively small elasticities in the export functions, and another set of relatively larger elasticities in the determination of export prices, a possibility offered by the export equilibrium formulation, discussed above. Needless to say, the degree of freedom in reallocating resources in an open economy greatly depends on the potential for foreign trade. Thus, it is crucial in such exercises to represent this potential properly. At present it appears that neither the techniques used in linear programming nor those in computable general equilibrium models are fully adequate for handling this problem.

A somewhat related issue concerns the incorporation of optimal tariff considerations into the applied general equilibrium models. It is worth to mention here, that the programming types of models will always produce an optimal tariff solution if volume-dependent export price changes are allowed for. One may analyze such solutions

in an applied general equilibrium model, as well as we have shown. The greater flexibility of the applied general equilibrium models is also shown by the fact, that this feature can be eliminated, if not wanted. It is rather questionable that the conditions of the optimum tariff theory are met in reality. For example, in the case of Hungary, the price decrease that follows an increase in export volume characterizes a weak position in the world market, rather than a monopolist position assumed by the theory. The assumed atomistic competitive character of the exporters may also be seriously questioned. These and other considerations imply, therefore, that the resource allocation pattern suggested by a programming model, in which export prices depend on its volume, is further distorted by this optimum tariff feature.

Nevertheless, it is interesting from a theoretical point of view to note that general price distortions may result in welfare improvement, similar, but not equal to the effect of optimal tariffs. Thus, if some international agreements, such as those of GATT, exclude the possibility of applying tariffs on exports, it is, at least in theory, possible to use general taxes on production as a second-best solution.

A further theoretical conclusion concerns our starting hypothesis, i.e. the possible importance of a price reform in a centrally planned economy. A general lesson that can be learned is that economic reforms that do not reach and genuinely affect the micro-decision level—'stop at the enterprise gate'—can produce only modest, if any improvement in overall economic efficiency. Unless there are major changes in the micro-structure of production, leading to more efficient use of resources at the enterprise level and more profitable and exportable products, a price reform followed by a rational reallocation of resources will not produce satisfactory results. Our simulation results also suggest that a complete decentralization of foreign trade, especially the export activity, may not be advantageous if export demand is imperfectly elastic. If domestic firms behave as atomistic price takers, there is some room for the central planning authorities to guide individual decisions in globally more efficient economic directions.

And finally, the analysis calls attention to some problems that relate to the foreign trade practice of small open economies. They are not conclusions derived from the analysis, but rather some general questions related to it and worthy of further study. It follows from our analysis that in a given period and with a given export product structure there is a pattern (structure and level) of foreign trade that is optimal for the economy. Do we have enough knowledge, say, in Hungary about this optimal pattern? Can we really control our trade pattern or is it dictated by the forces of the world market? How far is our present foreign trade structure from this theoretical optimum? Or, one might rightly ask, how large portions of our often reported sizable terms-of-trade deterioration (about ten percent of our national income) has been endogenously induced by the forced increase of export? These and similar questions arise naturally from our study. And they await answers, especially in the light of the last decade that was rather critical from the point of view of the Hungarian foreign trade policy (trade in convertible currencies has significantly increased in this period, at first as a natural lever of economic development, later dictated more and more by the balance of payments difficulties).

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РЕФОРМА ЦЕН, ЭКОНОМИЧЕСКАЯ ЭФФЕКТИВНОСТЬ РАСПРЕДЕЛЕНИЯ РЕСУРСОВ И УСЛОВИЯ ТОРГОВЛИ

Э. ЗАЛАИ

Один из составных элементов концепций хозяйственных реформ в странах Восточной Европы — это проблема реформы цен. Долгое время имеет хождение мнение, согласно которому одной из основных причин неэффективных решений является искаженная и поэтому плохо ориентирующая система цен. В статье на основе многосекторной нелинейной микроэкономической модели анализируется вероятный эффект реформы цен на перераспределения ресурсов при условии сохранения неизменной экономической эффективности на микроуровне. Центральное место в представленном анализе занимает вопрос структуры внешней торговли и вызванного изнутри изменения условий торговли.

Особое внимание анализ уделяет некоторым теоретическим и методологическим вопросам в связи с внешней торговлей, в частности т. н. гипотезе Армингтона. На основании последней в моделях общего равновесия обычно предполагается, что объем экспорта и удельная экспортная выручка являются взаимозависимыми функциями. Это решение невольно ведет к вопросу об оптимальном объеме и структуре экспорта, отклоняющихся от равновесия. Симуляционный анализ подтверждает известный методологический опыт, согласно которому применение различных нелинейных функций замены является более гибким и реалистическим средством предупреждения «слишком специализированных» решений, чем индивидуальные ограничения. В то же время выясняется и то, что применение функций экспортного спроса вызывает нежелательные изменения условий торговли. Автор показывает, что это неблагоприятное явление можно элиминировать соответствующим изменением модели.

С другой стороны, анализы показывают, что реформа цен сама по себе, даже если за ней последует рациональное перераспределение ресурсов, не изменит существенным образом общую экономическую эффективность. На основании симуляционного анализа, микроэффективность представляется гораздо более значительной, чем эффективность перераспределения. В заключение автор ставит в связи с анализом несколько общих вопросов, касающихся внешнеторговой практики стран с открытым хозяйством.

INVESTMENT POLICY AND STRUCTURAL TRANSFORMATION IN HUNGARY

I. BÉLYÁ CZ

With a view to the restoration and maintenance of economic equilibrium, investments have had to be radically curbed in Hungary in the past few years. Analysing the main features of the new situation, the article seeks to answer the question, whether the trouble is rooted in the quantitative reduction of the investment rate, or the tensions magnifying the difficulties caused by the reduced investment possibilities are to be looked for in the Hungarian structural policy.

The rate of accumulation, which used to be high in Hungary by international comparison, began to fall considerably in the late 1970s and, in our days, anxious statements are often heard about the sinking rate of investment,* for example, to the effect that it may reach (or has already reached) a critical lower limit. Our knowledge is, however, rather uncertain as regards the expedient rate of accumulation i.e. the optimum rate of investment and, just as in the past, our only difficulty in regard of the investment process was not that the rate of accumulation was high, the main investment problem of today is not that the rate of investment approaches the so-called lowest critical value. In the present article, I try to find the role played by the investment and structural policies beside the changes in the rate of accumulation. The explication is concerned with fixed capital *investment* which makes up the greater part of accumulation, while it does not discuss the otherwise important questions of *stockpiling* (inventory accumulation).

New phenomena in the investment process

In the ten years preceding the braking of investment both the gross and the net rates of investment were high in the Hungarian economy. In the period following the 1968 reform the investment rate reached the highest level in the late 1970s (see *Table 1*).

The data of the time series clearly demonstrate the sudden fall in the early 1980s. The rate of investment earlier fluctuating about an average of 25 percent plummeted to

*Rate of investment and rate of accumulation will be used as synonyms in the present study.
(Ed. note.)

almost its half by 1982–1983, and it is known from the plan targets that by the mid-1980s it will hardly be more than 10 percent. The gross rate of investment computed for the GDP also fell by 10 percentage points and in its inner structure a remarkable shift has taken place towards replacement. (In the investments of approximately Ft 184

Table 1
Rates of investment in the 1970s

Year	Gross investment	Net investment
	GDP	National income
1970	30.5	23.5
1971	31.7	24.9
1972	30.3	23.4
1973	29.3	22.4
1974	31.0	24.2
1975	33.9	27.6
1976	32.4	25.2
1977	34.7	27.9
1978	34.8	27.8
1979	33.1	25.7
1980	29.6	20.7
1981	26.8	17.8
1982	25.6	16.6
1983	24.9	15.8

Source: *Beruházási Statisztikai Évkönyv* (Statistical Yearbook of Investments) Központi Statisztikai Hivatal, Budapest 1982. p. 10.

thousand million implemented in 1983 by the state and cooperative sector, the share of replacement amounted to more than Ft 100 thousand million.)

The sudden fall of the rate of investment is not a specifically Hungarian phenomenon: in the advanced industrial countries it started not long after the first emergence of the world economic crisis. In the Hungarian economy not only the structural adjustment or the programme of a new growth path were belated, but also the working out of an investment policy and a rate of accumulation better adjusted to the new conditions was lagging. The data of Figure 1 also call attention to the fact that accumulation was at its peak in Hungary when the conditions of the domestic consumption (use) of national income (MPS) no longer justified it, so that the investment efforts maintained at the previous level played an important role in upsetting the external equilibrium. As a consequence of the over-distribution of national income between 1974 and 1979, the yearly additional consumption of Ft 20 to 30 thousand million mostly enlarged accumulation.

Since the rates of accumulation were not adjusted to the domestic consumption possibilities, a regulation radically restricting accumulation was instituted, so as to avoid a further worsening of the equilibrium situation. Under its impact, the 1979 investment peak of Ft 204 thousand million of the state and cooperative sector was followed by a reduction to a yearly Ft 180 thousand million. The restriction has led to the undeniable

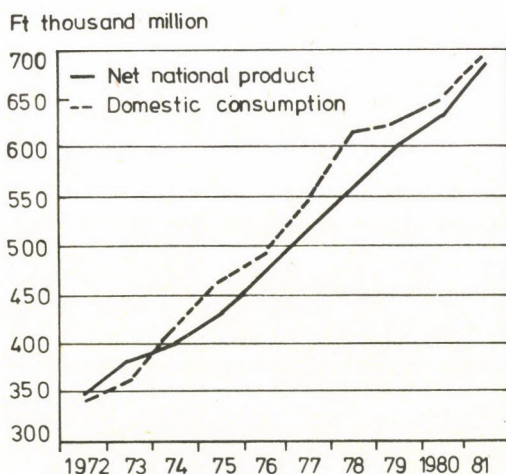


Fig. 1.

Net national product and its domestic consumption

Net national product —————
Final use in the domestic economy - - - - -

Source: *Népgazdasági Mérlegek* (Balances of the national economy) Központi Statisztikai Hivatal, Budapest 1980. p. 17.

achievement that no investment peak characteristic of the earlier decades developed. This result is, however, onesided and illusory, since the restriction only affected investment projects under implementation, while it failed to bring about any fundamental change in investment regulation.

In Hungary today it is held to be one of the main achievements of investment restriction that the development of a new investment cycle was successfully prevented. On a closer examination of the investment processes after 1979, however, the statement can be made that the implementation indicators of recent years are well fitted to earlier tendencies, with the difference that after the restriction the new cycle does not develop in the positive but in the negative domain. The only trough of the restriction period was in 1980; thereafter implementations were moderated at a decreasing rate, that is, an

upward trend developed once again. The upswing of the early 1980s can be well illustrated by the data of investment projects over Ft 5 million.* While in 1980 1854 such investment projects were started with an estimated expenditure of Ft 76 thousand million, 2509 projects were completed with a total input of Ft 138 thousand million. In 1981 the number of investment projects started was 2389 with an estimated expenditure of Ft 125 thousand million, and with the same amount of input 2374 projects were

Table 2
*Amounts spent on starting investment projects and the growing volume
of incomplete investments 1977-1982*
(Ft thousand million)

Year	Amount spent on starts	Growth in the volume of incomplete investments
1977	101	31
1978	70	26
1979	49	17
1980	40	5
1981	76	10
1982	98	16

Source: Beruházási Statisztikai Évkönyv 1980, 1981, 1982 (Statistical Yearbook of Investments 1980, 1981, 1982). Központi Statisztikai Hivatal, Budapest 1980, 1981, 1982.

finished. Although in 1982 both the number of new starts (2139) and that of completions (2274) were smaller than those of the previous years, the total estimate of the projects started (Ft 130 thousand million) showed a further growth. The total costs of the completed investment projects of the same year amounted to Ft 106 thousand million. Notwithstanding the fact that from 1981 to 1982, the number of investment projects over Ft 5 million under implementation (4582 and 4514) fell, the total estimate grew by about Ft 80 thousand million. The cyclicity of the Hungarian investment process, lasting for decades and best observed in its troughs, has not changed. This allows us to draw the conclusion that the fluctuation in the implementation of investment is also influenced by factors other than regulation. On a closer examination of the investment cycle, the statement can be made that *the starting of investment projects has played a determinant role in its development*. Beside the above-mentioned data on projects started, the data of Table 2 confirm the cycle-forming effect of the starts.

The change in time of the completed investment projects is based on the alternating phases of acceleration and deceleration of investment growth. The peaks do not show any particular regularity, but the troughs show an almost perfectly regular four-year

*Source: Beruházási Statisztikai Évkönyv (Statistical Yearbook of Investments), Központi Statisztikai Hivatal, Budapest 1980. p. 102; 1982, p. 120.

recurrence. Up to the late 1970s the most characteristic fluctuation consisted in the alternating accelerating and decelerating phases in the growth of completed investment. This also implied that at times of investment restriction the growth rate slowed down, yet without the investment volume falling in absolute terms. In the period that followed,

Table 3
The periods and turning-points of investment fluctuation

Peaks	troughs	acceleration of investment growth (reduction)	deceleration
1951	1954	1954-56	1952-54
1956	1957	1957-59	1956-57
1969	1961	1961-63	1959-61
1963	1965	1965-67	1963-65
1967	1968	1968-70	1967-68
1970	1972	1972-75	1970-72
1975	1976	1976-77	1977-80
1977	1980	1980-83 ^a	
1983			

^aIn that period essentially a deceleration was taking place at a decreasing rate.

Source: Beruházási Statisztikai Évkönyv (Statistical Yearbook of Investment) Központi Statisztikai Hivatal, Budapest 1981. p. 3.

restriction could bring about an absolute reduction as well, and thus a decelerating rate of reduction became the equivalent of acceleration. In this sense, the investment processes of the restriction period are an organic continuation of the fluctuating investment activities of the preceding decades. *Table 3* shows the acceleration and deceleration periods on the basis of the relative changes in investment, as well as the peaks and troughs of investment.

In the appearance of a new investment cycle a determinant role was played, among other factors, by the stabilization of the aggregate volume of investment in process and the shift in the inner proportions of the structure of goals. All along the 1970s, the aggregate estimate of investments in process was growing, reaching approximately Ft 800 thousand million by the end of the decade and, the radical decrease of accumulation possibilities notwithstanding, it became stabilized on this level. *Figure 2* shows the relationship between the aggregate investment estimate, and current implementations.

It can be read from the Figure that the stagnation and subsequent reduction of current implementation notwithstanding, the aggregate investment estimate settled on a high level because of the positive balance of investment starts and completions, and of the spreading of cost-intensive investment projects. The shift that took place in the structure

by size of investment clearly shows in the fact that while in 1970 hardly 300 investment projects of over Ft 100 million were underway, in 1975 there were 600, and in our days the number of such projects approaches 900. Also the number of the most cost-intensive investment projects—those above Ft 1 thousand million—settled at above 100 after the restriction period. In a single year: from 1981 to 1982 the number of investment projects

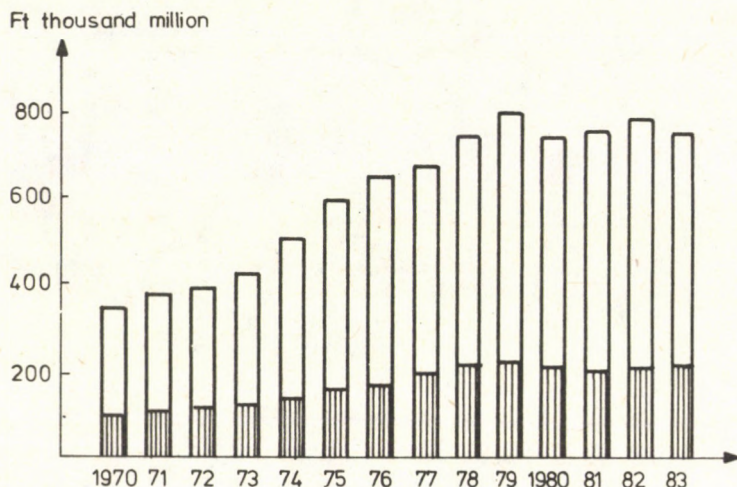


Fig. 2.

Aggregate estimate of investments in process, and current implementations

Source: Beruházási és építőipari adatok 1973–1980 (Data of investment and the building industry 1973–1980); Beruházási Statisztikai Évkönyv 1981, 1982 (Statistical Yearbook of Investments 1981 and 1982).

of over Ft 500 million being underway rose by 12. The growth of the aggregate estimate and the changes within the magnitudes are only partly explained by the rising investment price level. The average yearly price rise has been 6 to 8 percent in the period from the 1968 reform up to these days, which can hardly explain a five- to tenfold rise in costs in certain categories.

From the preceding we can draw the conclusion that the current rate of investment alone does not allow us to form a reliable judgement on the investment processes, and it is even possible that, a sinking rate of accumulation notwithstanding, dynamical investment starts increasing the tensions are still made. In spite of the continuously decreasing investment possibilities the still dynamical starts carry the risk that investment parameters (gestation period, costs, novelty value) will be widely deteriorating, and all this may worsen the chances for an equilibrium in the long run. The stabilization of the aggregate investment estimate in spite of a decreasing investment rate is not, in itself, a phenomenon to be condemned, nevertheless, its role played in the chronic investment tensions has to be clarified and so has the target structure in which the starts materialize, and the structural policy served by the investment projects.

What has changed after the curbing of investment, and what has not?

Prevention of the further growth of investment eliminated the quantity phase shift between accumulation and final use in the domestic economy especially large in the second half of the 1970s. In spite of a definite slowdown in the growth of national product and a constantly increasing deficit in foreign trade, accumulation for investment was dynamically growing, among other things exactly in order to serve the investment policy aimed at expanding exports. Current investment could be mostly restricted through reducing investment costs and a smaller contribution by the credit sphere. As a result of certain formal changes in the systems of decision making and financing, the burdens and commitment of the budget lessened and, as new starts could be avoided, the number of large investment projects underway decreased. As consequence of investment restrictions, no new deficits arose in the balance of the national economy. The most important question remains, however, whether the change in direction has laid the grounds for a way out in the long run.

Taking into account all the phenomena in respect of which *no* essential change has taken place, doubts may arise as to the possibility of finding a way out.

1. The reduction of the rate of accumulation has not eased investment tensions. *The enterprises' investment hunger has not abated* and, from 1981 on, the number of investment starts went up so dynamically, as if it had been justified by good market prospects. Parallel to the restriction of investment, a mass of targets, heavier than ever, weighs on the investment sector, owing to the investments under implementation. Because the enterprises' market-responsiveness is low, there is no restrictive power or any effective sieve to prevent the starting of investments of a doubtful outcome. Tensions are further shown by the prolonged gestation periods, and the higher than planned investment costs. By reducing the rate of investments, only a short-term and rather frail equilibrium could be achieved in the surface processes of domestic consumption, while the deeper layers of the investment process have not been affected by the restriction of money that could be spent on investment.

2. *The new capacities* started, finished and entering production as a result of the investment offensive emerging in the late 1970s *have not essentially improved the income-producing ability of industry*. Among the investment policy objectives of the 5th (1976–1980) and the 6th (1981–1985) five-year plans low-cost projects, with a short implementation period and fast returns has a large weight. The same tendency, however, has not been asserted in the investment practice; the ratio of the above-mentioned projects is slight within total investment. Structural transformation has been a central task of investment policy for almost ten years, yet the ever new investment targets have failed to improve perceptibly either adaptability, or competitiveness.

3. The *quantity* phase shift eliminated by investment restriction has been replaced by a *quality* phase shift. By this I mean that the investment structure, the selection of targets, the sectoral distribution and structure by size have not changed so as to adjust to the market, supply-guided selection of targets has continued to prevail; the majority of

projects started with a view to improve equilibrium rely on uncertain market information and involve much higher risks than the acceptable level.

4. One of the most important causes of the quality phase shift lies in the *increased investment commitment*. Since investments under implementation are oversize, there is a very narrow scope of decision within a period, since the investment capacity available in the period is committed by earlier decisions; because of these earlier commitments, free sources are disproportionately scarce. Hungary's yearly or medium-term plans start in a situation that is predetermined up to 50–60 percent, so that the starting and fast implementation of investment projects to serve a fast market adjustment is hopeless from the outset. The obvious disadvantages caused by the commitments have been further aggravated by the curbing of investment, since the dynamical starts of the recent years may easily lead to an 80 percent determination of the next medium-term plan period.

5. *In the formation of investment resources the levelling tendency and direct fiscal intervention are still strong.* In the system of budgetary subsidies and taxes such changes have taken place on the surface which have increased the development opportunities of the preferred—mostly large—enterprises. Though subsidies to make up for costs have been reduced, the profit-increasing subsidies have grown in the same proportion. The ratio of net income centralized in the budget is still very high, the enterprises' profit can be thus intensively influenced through income redistribution. The latter is dependent, to an extent higher than 80 percent, on allocations from the budget and not on good results achieved in market competition. It is the artificial swelling of enterprise development funds that lies at the root of the fact that from the mid-1970s up to these days the contribution of enterprise resources to net investment has nearly doubled, while both the budgetary and the banking net contributions have diminished.

6. Despite a largely reduced net accumulation, the suppression of firms or the *horizontal flow of investment resources are almost fully unknown*. Formation and reinvestment of investment resources go on in unchanged proportions and, apart from the state allocation of funds, no investment resource is taken away from the place where it has formed. In national economic plans and investment policy only development priorities are indicated, while so-called negative priorities are not.

7. The state budget and the banking system have *committed themselves to further high-cost investment projects with long terms of realization and slow returns to a greater extent than ever before*. The overwhelming majority of budgetary and banking resources, amounting to three quarters of total investment resources, are engaged by big enterprises working with low efficiency. All this has increased the direct and indirect commitment of the budget and narrowed down the possibilities of the banking system to support development projects justified by the market. The overwhelming dominance of big targets has further diminished the supply with resources of small and medium-sized investment projects.

8. Over and beyond the period of curbing it can be stated that the relative deterioration and obsolescence of the stock of fixed assets have increased despite dynamic investment activity lasting for a longer time and this will cause more and more problems

in the future. The large amount of investment has not palpably raised the technical standards either globally or in sectoral and enterprise fields. In the shadow of concentrated investment under the comprehensive development programmes replacement demands have rapidly increased and unsatisfied modernization needs accumulated. As regards the material-technological composition of productive investments, the share of machines does not exceed 40 percent even at present and this ratio is hardly more than 50 percent in the industry, too.

In the knowledge of the above phenomena it may be stated with good reason that *in the period of a reduced rate of accumulation reaction was only limited to tools of investment regulation without having re-examined the investment and structural policies.*

At a lower level of economic development superficial phenomena of reproduction supported the conviction that investment is a mechanically applied tool of the control of economic processes. The establishment of a new economic structure, growing employment, the creation of new work-places and the growth of consumption all appeared to be results of the fast growth of accumulation and investment. The increasing rate of accumulation was regarded as a tool accelerating growth and, accordingly, the continuous raising of the rate of investment became a lasting practice. Under the difficult circumstances of change-over to intensive development the recognition is maturing that there is no mechanical relationship between basic, vital processes of reproduction and investment. The basic contradiction of the post-curbing period is that while the long-term objectives of structural policy are formulated more and more progressively, the tools of investment policy aimed at their realization are unsuitable for the purpose.

On the surviving contradictions of investment policy

Several principles and requirements have been formulated in the last two decades which—if enforced—could have resulted in an efficient investment policy and favourable use of resources. Let us select the most characteristic of them which are known as the most progressive ones:

- Investment policy should envisage a selective development of sectors and enterprises.

- When selecting investment objectives the size of the economy should be kept in view, great emphasis should be laid on development projects with small and medium input demand.

- Development projects should rely on the possibilities of the international division of labour.

- Instead of new investment projects that expand capacities, intensifying replacements and reconstructions should be given a decisive role.

- With the selection of investment targets the flexibility of the economy, its ability to adjust to domestic and foreign market demands should be improved, furthermore fast returns should be put at the centre of efforts.

— Investment projects should serve the transformation of economic structure, they should be tools of structural changes.

— The gestation period of investment projects should be reduced, the weight of flexible development projects should be increased at the expense of projects with high input demand and slow returns.

Though the above objectives are really the most frequently mentioned and correct ones, yet they are simultaneously the expectations most rarely fulfilled in connection with the investment process. The failure to realize these principles and requirements indicates that countervailing factors are regularly reproduced in the investment process and the requirements are not enforced because the specific laws of the investment process have deviating motivations. If we wish to explain this contradiction, the particularities of planning, control and management have to be examined more thoroughly. Let us review them in turn.

Strategic problems of economic development

Perhaps the most serious problem of Hungarian investment practice is that the *development strategy is not clear*. By economic development strategy the ensemble of basic principles is meant here, relying on which development may be planned and controlled according to the size and potentials of the economy, its foreign economic positions and place in the international division of labour. The most important tension in Hungarian development strategy is caused by the fact that it is some mixture of strategies suitable for big and small countries, disregarding real possibilities resulting from the economic potential. From certain disturbances in development strategy the conclusion may be drawn that the coordinates of development are in many respects either not designated or have been wrongly determined.

— The weight and development needs of the extractive and basic material industries as well as of the energy sector are regulated primarily by sectoral demands, and there is no appropriate control that would prevent that their share exceeds the level justified by the realization of all development resources and the load-bearing capacity of the economy.

— In manufacturing the final stages of production were one-sidedly developed, while interim phases have remained underdeveloped, the inner coordination of various cross-sections is poor and the infrastructure of production (auxiliary, additional, complementing phases) backward.

— Development strategy does not properly rely on possibilities of an external division of labour, the number of cooperation deals is low.

— Strategies expedient for small countries concentrating on specialized, small-series production can only be found in traces. Development concepts starting from partial units may be very rarely met.

When comparing the aforementioned principles and requirements with the lack of a strategy corresponding to a small country we can state that development strategy fighting

against disturbances arising from the dimensions favours precisely such investment targets which are fully contradictory to these requirements. Overcoming the thus arising contradictions is very difficult even in the longer run, since unfavourable trends are amplifying each other. A fast development of the basic material and energy sectors is required, among other things, because of the autarkic development of manufacturing, the high specific material and energy demand of production and the insufficient utilization of advantages resulting from the international division of labour. It reflects disturbances in judging right proportions and in development strategy that in the period of change-over to intensive development half of the total industrial investment of a country with a rather moderate economic potential is committed to development projects in mining, metallurgy and the energetical industry. The lack of a proper strategy suitable for the size of the country is best indicated by the fact that the aforementioned extractive sector as well as the large-scale target-oriented capacities of manufacturing branches engage investment resources that can be spent on material production for a long time and impede the appropriate profitable development of several fields.

Characteristic features of investment policy

The main characteristic feature of investment policy is its lasting and increased commitment to projects with high capital intensity. The negative impact of these projects strengthens the similarly negative ones of earlier started unfinished investment projects, and the joint consequence is that new investment projects may only be started in the—often remote—future. Priorities of investment policy cannot be enforced mainly because of the large number of priority projects, their long lasting impact and because each global development trend consumes a considerable part of resources. *Hungarian investment policy—even in the longer run—can much more be regarded a mechanical sum total of partial development ambitions than an allocation of development resources aimed at finding the optimum solution.* Centres of gravity of investment activity are usually formed in comprehensive development directions which means in terms of finances an increased centralization and concentrated redistribution of investment resources. The budget draws away the major part of incomes in each sector of material production and regroupes them according to development priorities. The main contradiction lies in that the overwhelming part of incomes is formed in the competitive sphere, yet a considerable part of them is allocated to branches with low efficiency and high capital intensity.

How is it possible permanently to invest disproportionately large sums into extractive activities? The only possibility is that the budget draws away the coverage for this from fields producing income. Investment purchasing power can only be curtailed where income is formed at all, thus fields with low efficiency enjoy advantages again. The regrouping of resources causes unambiguous social losses if it allocates resources from branches creating value and income where the investment of a unit of capital is sufficient for a unit of output into such branches where the same result may only be achieved by

using 6–7 units of capital. Development projects with high capital intensity are realized, of course, not only in the extractive sphere; this is largely characteristic of target-oriented capacities in the manufacturing industry, too.

The manoeuvring possibility of investment policy is at times limited by the cycle-generating effect of the reproduction of fixed assets. If development was concentrated previously, then at the end of the replacement cycle demands for reconstruction will be concentrated as well. *This is one of the reasons why the subsequent new medium-term plans are unable to enforce new priorities and there is no possibility for considerable structural changes because of the self-reproduction endeavours of the existing structure.* In consequence of the cyclical effect priorities of previous decades are reproduced and, parallel to this, the lack of adaptability is reproduced as well. This largely explains why the importance of reconstruction projects in the manufacturing industry, of rapidly realized and paid-off small and medium development projects as well as that of increasing flexibility has been emphasized in vain during the last decade; the cyclical effect and the re-emergence of previous priorities have always proved to be stronger. True, the effect of the replacement cycle has by far not asserted itself very thoroughly; in the shadow of some large-scale programmes the putting off of the replacements and reconstructions has become a very frequent phenomenon—especially in the sphere of small- and medium-sized plants as well as in efficient big factories short of resources. The mid-1970s were a very important turning-point when favourable possibilities were offered for changing the direction of investment policy, but these were not exploited, last but not least because of the coincidence with the new cycle of development priorities of the 1950s, and overemphasized partial replacement demands were acknowledged in investment policy one after the other. Only a smaller part of resources could be allocated to the manufacturing industry on the basis of the remainder principle which, again, were used for the establishment of target-oriented capacities in a concentrated way.

The decreasing rate of accumulation was not accompanied by changes in the direction of investment policy, what is more, the traditional concept of selecting investment objectives runs explicitly counter to the declared principles. *When the need to reduce the material- and energy-intensity of production, the necessity of rapidly realized and paid-off investment projects ensuring flexibility are strongly emphasized, it is irrational to shift the investment structure towards material and energy producing as well as material- and energy-intensive manufacturing fields.* In the wake of the investment policy of the last decade the lack of adaptability and flexibility has been reproduced because no conceptual revaluation of investment policy has been undertaken. The new challenge of the world market was met by the same structure by branches and objectives and the reactivation of previous development trends which had brought about the previous disturbances in adjustment. One of the main reasons for this blind alley of investment policy is that the majority of structure-forming decisions were centrally taken and there were only very few development directions not ordered from above, but selected on the basis of enterprise initiative.

Contradictions of a centralized structural policy

Previous periods of Hungarian economic development were determined by centralized investment and structural policies. Sectoral development concepts, central development programmes, centrally initiated reconstruction programmes and other technical and economic concepts were all mainly investment programmes and engaged the bulk of available investment resources through several medium-term plan periods owing to their sheer order of magnitude. The major directions of development were designated by central economic management and this practically also meant decision-making in investment matters. No alternatives and development variants could be selected within the main direction according to market effects and requirements of a rational division of labour, thus structure-formation had become a privilege of major investment projects. Impulses for structural changes arrived at the enterprises from above and the zone has always remained narrow relative to the entire economy where resources could be raised for development concepts reacting to market effects in the short run.

Centralized development programmes were attached to individual branches, still (or precisely on this account, therefore) they could only cover a section of the entire vertical production process. In consequence of the complexity of the division of labour, the great number of possible development variants, the impossibility of coordinating price, value, cooperation and interest relations at higher level and because of several other reasons *vulnerable, risky production structures sensitive to equilibrium were created*. The problem is not simply that central management had not properly selected development directions that would be efficient also in the long run, or that not the appropriate branches and product groups had been developed, but that *the mechanism of centralized structural policy had been based on a wrong chain of thoughts*. Development programmes had been based on snapshots of physical needs and market situations, thus they stimulated such a development of various product groups or production lines whose connected, multiplying requirements and consequences had not been assessed. Concepts based on such snapshots became critical because by the time the capacities entered production, the profitability of the final products (or its partial units), their comparative advantages or disadvantages could change, to which these programmes could no longer respond, long reaction times limited sensitivity.

Structural policy based on development programmes possesses the illusory advantage that it is selective and concentrates resources. In reality, this concentration of power realized through programmes excludes several enterprises from obtaining resources even within a sector included in the programme. Thus enterprises lagging behind even within branches earmarked for development are appearing and their later catching up again requires a one-sided concentration of resources.

The fundamental problem of central development concepts and programmes is their deviation from the original purpose. They do not aim at development in the complex sense of the word, that is, these programmes do not cover the entirety of technical, technological, research, product development, training or management problems, but

only mean investment programmes in such a way that decisions on the details are made by state control and management agencies. This simplification does not make these programmes suitable for an efficient solution of structural policy tasks, what is more, they increase the danger of structural rigidity. It has become clear especially in the period following the 1968 reform that tasks of structural transformation cannot be solved by major investment projects alone or by the central earmarking of branches to be developed. In order that investments may have an efficient structure-forming role, the unexplored relationships between investment policy and structural transformation have to be clarified.

The role of investments in the modernization of economic structure

In the 1950s and 1960s investment was regarded first of all as a tool accelerating growth and providing foundation for larger consumption in the future, while amidst the sharpening adjustment disturbances of the 1970s as a structure-forming factor that would help in adjustment to world market conditions. The overwhelming majority of investment projects started in the last decade set as its aim the growing ability to export to the world market and these projects were intended to respond to the challenge raised by changing world market demands. These responses had in their majority only a limited result owing to slow realization, low adaptability, the target-oriented character of capacities, etc. During the period indicated the overwhelming majority of industrial investment projects were realized in the basic material producing and extractive industries as well as in manufacturing fields destined for improving world market competitiveness. The intention of increasing western exports considered investment as a mechanical tool of structural transformation. From this concept so much was realized—at least in the first few years—that a lot of investment projects with high input demands each had been started. The majority of these development projects carried promises of structural transformation (for central management and the banks), but in reality they only conserved the old structure, because neither development concepts nor later outputs could directly face market demands. Income regulation and a wide-range redistribution of incomes also had a structure-preserving function. It should be clear even without any explanation or argumentation that the structure-forming role of investment policy cannot be isolated from a permanent assessment of decision makers by the market, from threatening and compelling effects of competition. In the early and mid-1980s the most serious structural policy concern has been that investment is still not market-oriented; the selection of objectives, regulation of resources and redistribution are still based on the old principles.

The Hungarian investment policy cannot get rid of the "comprehensive programme approach" controlled from above. What is more, even the danger has to be faced that *sectoral* (branch) concepts of the last two decades would be replaced in the future by inter-sectoral development and investment programmes whose determinant effect is even greater. In order to be able to draw the necessary conclusions from mistakes of the past at

last, basic issues of structural policy have to be reconsidered. The ideal path leading toward structural transformation—under circumstances of change-over to intensive development—is not a few hundred big steps in investment policy, but several thousands (tens of thousands) of small steps. As much as it is important that, owing to technological requirements, conditions for concentration of investment resources should be ensured in certain branches from time to time, it is of the same importance that appropriate development resources should be provided for all size ranges of each sector (branch). It is an old experience that the overwhelming majority of investment resources is allocated to a fragment of investment projects (as regards their number). While in the extensive stage of development a precondition of structural transformation had been the concentration of resources on a selected sector or branch, at a higher level of development efficient structure-formation requires precisely a wide distribution of resources and their deconcentrated utilization.

An important consequence of investment policy relying on comprehensive programmes is a cyclical, jerky formation of development resources and a concentrated demand for such resources in backward fields. As a result of comprehensive programmes large amounts of replacement funds are formed which stimulate reinvestment into the same branch, while for the catching up of fields left out of programmes considerable resources would be needed for reconstruction. The entire mechanism has an important contradiction: concentrated development carried out in earlier periods raises similarly high reconstruction demands at the end of the replacement cycle and involves the danger that, if the starting points are replacement needs the right to reproduce fixed assets (capital) should always and everywhere be acknowledged. Under such circumstances the continuous self-reproduction of the economic structure once established is an acute danger. In the course of reconciling the requirements of investment and structural policies, it turns out that tools and processes of the investment system, for long thought of as progressive, may lead structural policy into a blind alley. More clearly, the problem is the universal right of dynamical maintenance of the level of production and of reconstruction. It was a generally accepted view in the 1970s that reconstruction projects modernize the structure while replacement and the modernization of assets are a progressive alternative to new investment projects in the "green fields" and one-sidedly enlarging capacity development. Experiences with the selection of investment objectives did, however, point to the dangers of reconstruction aimed at the saving of existing structures. It is already clear by now that demanding reconstruction programmes may be as wrong a way for the reproduction of fixed assets as had been the dominance of expansion previously. The reconstruction of a previous structure may only be a selective process—as regards various levels of the economy (sectors, branches, enterprises)—, i.e. modernization should be given up in many fields, what is more, suppression may also become necessary. Sectoral, and even inter-sectoral reconstruction programmes may not be considered as development alternatives, since there exists the danger of an almost unchanged reproduction of the old structure. By the middle or the end of the 1980s there will be such an enormous stock of fixed assets mature for replacement that may

unambiguously determine the directions where available investment resources may be used.

Concrete directions of reconstruction and suppression, respectively, may not be expediently determined by centralized structural policy tools. Such *central* decisions may hardly be made which would induce efficient development measures at enterprise (or machine group) level. When implementing structural policy objectives through investment, though central decisions may not be dispensed with, yet their role should be considerably different from that in the period of extensive development. There is an immense variety of structural adjustment possibilities and these ways and directions are most reliably found by the enterprises themselves. The structural policy task of central management should be primarily not the designation of development directions, investment decision making or programme formation, but determination of the role of the state in connection with dynamic development and suppression, respectively. Directions of suppression at enterprise level may hardly be determined centrally, but the attitude of the state in case of lasting losses, stagnation or decline may already be defined. It is basically inexpedient to begin with extreme questions and answers when dealing with problems of suppression, i.e. to start from the liquidation of entire production lines, branches or comprehensive cross-sections of productions. Several tasks connected with efficient structural transformation may be left to the enterprises, merely the theoretical basis should be provided for: to enable the socialist enterprise to withdraw assets from production, to acknowledge reproduction on a narrowing scale as a possibly positive feature, furthermore, to find ways where assets withdrawn may be regrouped on the basis of enterprise interests.

The main obstacle to rational structural transformation in Hungary is at present not the lack (what is more, lasting decrease) of net resources to be drawn into development, but the underdevelopment or lack of those redistributing mechanisms which could regroup existing stocks of fixed capital and resources formed in the real sphere among the enterprises. As distinct from prevailing views, structural transformation may be moved away from the deadlock not only by inspirations initiated from above, but also by the selection of development directions justified by enterprise initiatives. The successful realization of structural policy objectives cannot be imagined when restricting natural selection by the market. And, here we are again faced with the doubts and worries mentioned in the introduction, according to which, if the decrease of the rate of investment is approaching a critical level, then future growth and consumption may be endangered and an efficient structural transformation cannot be imagined. We only rarely look behind these doubts and mostly fail to raise the similarly exciting question whether modernization and structural transformation had been previously faster under considerably better investment possibilities. Present and future structural changes may not be decisively based on the distribution of increments, but only on such a redistribution where certain production lines, technologies and workplaces will be (partly or entirely) eliminated and the resources regrouped. An important condition of this would be to change the attachment of development resources to a single enterprise or objective. The

traditional (use value) concept of the reproduction of fixed assets should be replaced by the free flow of liquid resources and by the requirement of the possibly most favourable realization.

It may be seen that the relationship between investment policy and structural transformation is not merely a question of the rate of investment or of allocation. It is unambiguous that selection by the market i.e. a selection of enterprises and development directions depending on their being able to answer market requirements is needed as well as that central redistribution should not divert from market value judgements, nor give permanently preference to fields of production only surviving through continuous reallocations.

Conclusions

Our chain of thoughts started from the question how the falling rate of investment and the radical restriction of available net resources affect structural transformation. It may be concluded that the rate of investment alone does not qualify the investment process. Also the contradiction should be reckoned with that the volume of investment practically remains unchanged despite a considerable decrease of investment performances in terms of real value.

The ideas raised and expounded suggest that there are several conditions of the efficient combination of investment policy and structural transformation, which have not been explored or developed as yet. In the following we are going to summarize the most important interrelations regarding which a change in attitude, a modification of control and regulation as well as the solution of pending problems of principle would be required.

— In investment policy emphasis should be shifted from centrally organized and controlled sectoral or inter-sectoral development programmes to the selection of development directions on enterprise initiatives. Central programmes need not be excluded but their present exaggerated weight (amounting to 60–70 percent of total investment) ought to be considerably moderated.

— The enforcement of a dynamical maintenance of achieved production levels as a uniform requirement should be revised, namely, on the basis that the reproduction of fixed assets may only be selective if the demand for replacement and reconstruction is at places, and from time to time, not acknowledged.

— The problem of reproduction on a narrowing scale and of the withdrawal of assets under circumstances of socialist enterprise management should be clarified in principle, while looking for an appropriate solution not within the framework of traditional resource withdrawal and redistribution, but by revealing the motives and efficient forms of regrouping with direct enterprise interestedness, avoiding the budget.

— Such management of investment resources is required where each enterprise having efficient development concepts may regularly obtain resources; and the financing commitment, burdens and the measure of indebtedness of individual enterprises should

not depend on the scarcity of resources, but on the efficiency and returns of development projects.

— In the course of the reproduction of fixed assets—as against the previous practice—the tool of suppression should be made use of resolutely, but this must not be a process controlled from above; the suppression should be brought about by market selection and thus the “natural” selection of enterprises.

Structural transformation and the rearrangement of development directions are possible even with the present very low rate of investment, especially if in spheres not meeting the efficiency requirements not only the right to grow but even to maintain the same level is queried. Even with the fastest imaginable growth there will never be so much development resource available that would be required for the renewal of the stock of assets waiting for reconstruction at present. During the last three decades the stock of domestic assets doubled twice in width in Hungary. The next one and a half decades to come must not be a period of another doubling in width, a selective renewal in depth is required.

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ИНВЕСТИЦИОННАЯ ПОЛИТИКА И СТРУКТУРНЫЕ ПРЕОБРАЗОВАНИЯ В ВЕНГРИИ

И. БЕЯЦ

В первой части статьи дается краткий обзор инвестиционного процесса после изменения экономической политики в конце 1970-х годов. До середины 70-х годов доля капитальных вложений в общественном продукте постоянно возрастала, а затем с конца десятилетия стала неожиданно падать, что можно объяснить исключительно резким падением доли чистых капиталовложений. Вследствие этого коренным образом изменилась структура источников капитальных вложений, определяющим стал фонд замещения (амортизации). Сокращение капиталовложений можно считать на основании более тщательного анализа сложившихся тенденций противоречивым процессом. Если текущие завершённые капиталовложения постоянно сокращались, то в определенные годы наблюдался динамичный рост начатых объектов капитального строительства, в результате чего объем начатых капиталовложений стабилизировался на высоком уровне.

Во втором разделе рассматривается, насколько изменились напряженности системы капитального строительства в результате снижения его темпов. Автор считает, что по многим важным пунктам существенного изменения не произошло. Снижение фонда накопления не ослабило напряжения инвестиционной деятельности, инвестиционный голод предприятий едва ли уменьшился. Начатые раньше и введенные в последнее время в строй мощности существенно не изменили доходопроизводящую способность промышленности. Выбор инвестиционных целей не соответствовал в нужной мере требованиям рыночного приспособления. Для образования источников капитальных вложений по-прежнему характерна уравниловка и непосредственные вмешательства госбюджета. Наряду с государственным бюджетом банковская система — даже в большей степени, чем раньше, — дает предпочтение целям, требующим больших затрат средств и времени и медленно окупающимся.

Последний раздел статьи посвящен роли капитальных вложений в модернизации структуры. В связи с этим отмечается, что хотя при достижении целей структурной политики с помощью капиталовложений и нельзя обойтись без централизованных решений, их роль должна быть иной, чем в период экстенсивного развития. Взаимосвязь инвестиционной политики и структурных изменений — это не просто вопрос темпов или распределения капиталовложений. По мнению автора, в инвестиционной политике вместо отраслевых или межотраслевых программ, организуемых и управляемых в централизованном порядке, упор следует делать на инициативе предприятий в выборе направлений развития. Необходимо пересмотреть действующий в качестве единого требования принцип динамичного сохранения достигнутого уровня. Необходимо принципиально выяснить вопрос служебного воспроизводства и изъятия средств в условиях хозяйственной деятельности социалистических предприятий. В воспроизводстве основных фондов необходимо, в отличие от прежней практики, решительнее пользоваться методом свертывания производства.

CONSTRAINTS ON PROFITABLE GROWTH AND EXPORTS IN HUNGARIAN AGRICULTURE

K. LÁNYI

The structural problems of the Hungarian food economy* have grown more acute lately. An increasing share of agricultural products can only be sold on foreign markets, while production and export is directed mainly towards a few mass products, first of all cereals and meat. Its markets are increasingly those of the socialist countries, while the sector depends on a growing volume of Western imports. The authoress wishes to point out those deeper-lying causes concerned with structure, mechanism, and institutional system, which have driven Hungarian agricultural development onto a forced path. It is not expansion at all price but a fuller integration into the domestic economy and an internal reform, corresponding to the sector's nature, that may trigger the adjustment to external markets.

Contradictions between the growth of food production and its export-orientated specialization

Growth of production

During the 1970s, the growth rate of agricultural production in Hungary was the second highest in the world. This exceptional growth rate produced certain tensions. Domestic industries, supplying inputs to agriculture, especially the one producing agricultural machinery have proved to be a narrow basis for such growth and, what is more, it got into a critical situation just when agricultural production was on the upswing. It cannot be said, even today, that a close economic interaction exists between these two sectors. The primary processing of agricultural products bound to take place right at the farms or somewhere near them, and almost the total food processing industry has been lagging behind agricultural production in the strictest sense of the word. The road network, transport and storage capacities are inadequate considering the quantities produced. Establishment sizes, technology, and the scheduling of deliveries would require a tolerable system of telecommunication and office administration: these are lacking. The size of the machine park and the production systems would need the presence of a certain number of engineers and technicians right in the field; yet the number of engineers and technicians is small: and they are attached to the centre of the system. The network of machine repair shops and the services concerned with the use of machines have not been satisfactory built out, they are far away from the production units, or are not sufficiently

*Food economy=agriculture plus food processing industries. (Ed. note.)

specialized. The health and welfare facilities of the farms lag far behind the needs of the existing or desirable labour force. Besides the spectacular growth has already caused environmental damages difficult to remedy.

Growth of exports

As opposed to other socialist countries, agricultural development in Hungary has not only eliminated the troubles of domestic food supply, but yields a growing exportable surplus.* The most important differences in economic management are the following; the system of directive planning has been abolished; trade of produce is only under partial control; farms have a certain freedom of choice concerning investment and technology; the number of giant farms is relatively small; on about a tenth of the cultivated area small-scale production is pursued, giving room to individual initiative. All this, however, has been insufficient to remedy the isolation of agriculture in the period following the reform of 1968 and to establish those connections between agriculture and the enterprises of other sectors failing which neither the activity of agriculture nor that of the affected sectors can reach the efficiency necessary to compete on the world market.

The concentration and reorganization of establishments in Hungarian agriculture during the 1970s, and the existing institutional system of agriculture have created a framework for the industrialization of agriculture i.e. for vertical integration similar to those in socialist economies dispensing with reforms. It has not brought about the growth expected. In Hungary, however, the above-listed elements of the reform being maintained after the reorganizations have been sufficient at least to bring about expansion. This provided justification for the reorganizations, yet resulted in a type of growth in which export to socialist countries became a necessity. Because of the shrinking of the traditional West-European markets, an increasing share of the Hungarian food exports is directed to the socialist countries.** It is needless to discuss here the profitability aspects of the growth directed to the socialist markets. It is a well-known fact, however, that profitability is not always measured by prices, but is often blurred by complicated barter constructions, requiring a central overview, central control of enterprises, jeopardizing finally enterprise autonomy. At any rate they certainly hamper the development of those structures which are needed for the market type adjustment process.

*In the mid-1960s only about 22 percent of agricultural output was exported, processed or unprocessed. This rate today amounts to 30 percent.

**In 1982 already about five-eighths of Hungarian food exports were absorbed by the socialist and only three-eighths by the advanced industrial and the developing countries. The reverse relation holds for the ratios of turnover accounted in roubles and dollars, amounting to about one-quarter and three-quarters respectively. (For both data see: Statistical Yearbook 1982, KSH Budapest, 1983.) For our reasoning, however, it is the economic conditions and institutional effects of production and sales that are important, and not the currency of accounting, by all means a more incidental element in the situation of food economy, than specialization on the market and in products.

**Some interrelations between the development
trend and the role in foreign trade of Hungarian
food economy**

Hungary's share in the food export of the world is about the threefold of its share in total world exports. It has some food articles—mainly processed ones—which are palpably present on the markets. The majority, however, i.e. more than 60 percent of its agricultural and food exports consist today of cereals and meat.* At the same time the export share of other products, especially of processed food, has decreased, their development has been neglected and meanwhile, their profitability has also deteriorated.

Thus the Hungarian food economy has specialized for the production and exports of mass products. It is true that such production needs a lot of land, capital, and non-agricultural raw materials, but it needs very little highly qualified labour. Production organization and selling are simple, easy to survey and centralize, the need for market information and decision-making is incomparably smaller than in the case of other agricultural and food products.

The capital requirement per unit of land of the intensive cultures, and of fresh or canned food articles of a higher degree of processing, or just better processed is not lower than that of cereals, livestock or meat. The only advantage they offer is that the same amount of capital employs a higher number of qualified labour, including the special knowledge and activities of trade and of the sales network.

If such knowledge is present or available, or its acquisition seems to be desirable, the nature and organization of both the markets supplying inputs for agriculture, and of those absorbing its exports affect the agricultural development of the given country; they may bring it to a halt, or they may provoke the need for further development and a higher degree of organization.

Exports to undemanding markets entail a lot of disadvantages. Such markets do not sufficiently require, nor are willing to pay for the additional knowledge and higher degree of organization embodied in the product. In the case of opting for more demanding markets, however, it is inevitable that the producers of the exporting country establish the closest possible relationships with the users. Besides, it may prove to be highly useful, if the state undertakes certain marketing, publicity, and trade promotion activities, as the distribution of some of the external market information, or the organization of a nationwide advisory service are conceivable mostly as a government task.

It is an advantage if the producer knows where the product produced and primarily processed by him is going to be used, if he knows who will take it and what it will be used for. The flow of information necessary thereto is inconceivable within large organizations of hierarchical structure. This statement holds not only for agricultural

*In 1982, about two-thirds without beverages and tobacco (SITC 0); 8 percent of the total cereal exports and 42 percent of the meat and livestock exports went to the advanced industrial and the developing countries. (See: Foreign Trade Statistical Yearbook, Budapest, 1983.)

production. Its consequences should be considered in respect of the entire chain of processing and sales, including foreign trade. In any other case, only the exports of a few mass products planned in physical terms can be maintained and increased, or may seem successful, exactly of those products the demand for and the price of which are the most fluctuating.

Why has Hungarian agriculture not moved towards a specialization promoting competitiveness on the world market, and why have agricultural production and exports not stabilized on the level which conforms better to the development level of the country and of its agriculture, to its geographic location, and to profitability requirements? *

Two issues related to the constraints on profitable growth, and to a growth strategy promoting the production of mass articles will be discussed: the interactions between estate and farm structure; and the difference between the Hungarian and the West European systems of subsidies and prices. We have selected exactly these two issues, because they can serve as the best starting points from which the inherent conflicts of the Hungarian food production and exports, as well as the causes of the relative isolation of the food economy may be the easiest to reveal, and also because it is exactly these two problems—establishment size, and the relationship between the system of subsidies and the price system—which have been the least highlighted issues in the course of disputes in recent years.

Establishment sizes and the enterprise framework in Hungarian agriculture

In agriculture today no such machinery techniques and technologies are known in primary production, which could not be well operated within the framework of family farms or of cooperatives of not too large membership. Large-scale farms based on hired labour can be competitive—at least in Western Europe—in satisfying certain special needs, such as growing fruits for the canning and preserving industry, or grapes for cheap wine, etc. As far as concentration of land is concerned, advantageous establishment sizes depend to a large extent on how and in what time each working place can be reached by workers and managers, and on the transport costs of materials, implements and products within the farm.

Due to the nature of agricultural processes a lot of decisions which have a direct economic effect are to be made at the various working places, on the spot. If the workers or their direct superiors make these decisions without possessing the necessary information on costs, prices, terms of delivery, and the subsequent way of the product, it is only by chance that their decisions coincide with those that would have been made by people having an overview of the whole management.

*During the past twenty years, the share of food economy in the country's total exports has been fluctuating between 22 and 24 percent; its share in the exports accounted in dollars has been much higher and is still about 30 percent. Food economy has been considered up to recent times a sector in which production as well as exports are to be constantly boosted.

It follows from this as well as from features found on advanced markets that diversified establishment sizes and forms of enterprise would be needed in the Hungarian agriculture and food processing industry. The form and established size of estates need not be an obstacle.

The main problem is that the limits of the business organization and enterprise are strictly determined in Hungary by the given size of estates apart from a few exceptions, and this also determines the technological development and the product pattern in several respects. For example, technological development has been following, now for two decades, such a way that the volume of production of each product and the required area are adjusted at each farm to the most productive equipment of the largest capacity. These are almost never buildings and equipments serving primary agricultural production, but those for the handling, storing, and primary processing of products. (This is the case even if such equipments are scarce.) This is what partly accounts for the fact that the merger of farms and, parallel to it, land concentration have become a process which cannot be stopped for any long period, even though all its disadvantages have been more than once recognized.

One might think that mass production adjusted to the equipment of maximum capacity promotes a reasonable specialization of large-scale farms. For the time being, however, the contrary is true. Every Hungarian large-scale farm pursues several loosely connected or entirely independent activities. The farms are divided into isolated production branches without a common base of machinery or if they have one, it is a forced solution. The specialized knowledge, connections, and market experience of those engaged in one field are not usable in another one. Very often these activities have not even been linked in a farm by considering income or the security of incomes. The larger the farm, the more likely each production line connects the outside world only through a hierarchical organization, and not through the organizations whose materials and machines they are using, or which buy their products.

In today's Hungarian village it is mostly the agricultural small producers having direct access to the market, which is to be considered a specific one, with purchase and sales channels adjusted to the demands and potentials of small producers, though not at all satisfactory and not easy to survey. But the workers of large-scale farms, the managers of village-size production units, or their technical staff have almost nothing to do with the market: buying and selling are the task of a special apparatus, which keeps the information it has to itself. When the trade federations of agricultural cooperative farms dissolved very soon after 1968 (or had not been formed at all), it has been settled for a long time that those engaged in a special production line should not have any contacts with others engaged in the same activity at some other place. As a matter of fact, it is exactly being closer to one's own market, the flow of information within the trade, and knowing the terms of competition, which are the conditions of competitive production and of a reasonable specialization, failing which hardly anything can be said of reasonable establishment sizes and of combination of production lines.

The present Hungarian estate structure is extremely polarized: there are about one and a half thousand large farms and about one and a half million dwarf farms of which at least one million are functioning as independent farms—and hardly anything in-between. It is an interesting development that, for the first time in centuries, the farm—or today rather enterprise—structure almost perfectly corresponds to the estate structure. That is to say, agricultural production is pursued in about one and half thousand large enterprises, and in at least one million small ones.

Quite a lot has been said about the cooperative members' household plots having to thank their good results to their symbiosis with the cooperative farms, which is true. It is also true that in this form of cooperation, first developed in Hungary among the socialist countries, there are still latent reserves. It is, however, to be seen that the more advanced the cooperative farm is, the easier its cooperation with the household plots of its members becomes a burden for it, from which it can free itself, for the time being, only if the household-plot farms cease to exist. It is a warning sign that the much less subsidized, so-called auxiliary farms (small farms of workers, employees and other private individuals) show more willingness for commodity production, than household plots. There must be, within both groups of farms, a small part in which the member of the family managing the farm would be able to direct production in the farm expertly, and expand its size. For the time being, the forms are missing within which he could do so legally, without transgressing the generally accepted moral norms.

Several studies have shown also that, after a series of mergers of both state farms and cooperatives the average results of the smaller production units, and especially of smaller cooperatives, are better than those of the large ones.* Without intention of overestimating the advantages of cooperation and of true cooperatives, we are sure that in those regions where the traditions of cooperative farming are alive, this form of agricultural production, purchase and sales, and of the protection of interests of producers, in which the members have a general overview of the economic circumstances of their activities and are in a position to control the utilization of their work and property, can be highly efficient. We do not believe that this general overview, control and enterprising spirit could be replaced by the self-accounting units and brigades of today's cooperatives. This form serves, namely, only for a material incentive for workers (which is no small matter). Measuring technical and physical effort, sometimes through the mediation of market prices or internal accounting prices, has no real connection with the business side of farming. The latter is inconceivable without market impulses, a direct access to the market, and market decisions.

Thus in today's Hungarian state farms and agricultural cooperatives the limits of enterprising may go beyond the farm or estate, within a given estate, however, there can only be one enterprise or undertaking. Thus enterprises can be enlarged only through land concentration and the merger of whole estates. It does not occur that parts of an enterprise break away and new undertakings are born within a given estate. If also land is

*Let us mention here only the study [1] by Ferenc Donáth.

needed for a new venture, it will turn out that the breaking up of the block of estate once merged is quite impossible, and also land lease is limited.

All this presents much too high barriers to establishing an organizational framework for a specialized and sufficiently differentiated production in Hungarian agriculture, towards which already quite clearly defined profitability requirements could be asserted.

The system of agricultural subsidies and the Hungarian price system as obstacles to profitable growth and exports

Agricultural subsidies in Western Europe, and food prices

Under the present circumstances, the modernization of agriculture is impossible without external, usually state, subsidy. In Western countries only a small part of this subsidy is spent on the primary production processes, while the greater part is centred on activities concerned with the preservation of the quality of goods, storing and selling. This is quite natural, if it is taken into consideration that these activities require more capital and qualified labour than the specialized small farms making use of them.

In Western European countries state subsidies provide steady outputs and a quality satisfying market demands. The production technologies and sales methods demand an expertise relatively easy to acquire, and the centrally preferred forms of integration require a high degree of discipline in production and sales. These technologies and the attached technological development have been called to life by modern marketing methods and by industries producing inputs for agriculture. They have been made acceptable by the form of vertical integration based on cooperatives or similar organizations characteristic of Western Europe. Subsidized agricultural production ensures a relative security of employment and income, an easier way of life for producers than that of the traditional peasantry, while for the processing industries and consumers it ensures a standardized and regular supply with comparatively small fluctuations in prices. Its beneficiaries are, however, mainly commerce itself, and the industries producing inputs for agriculture. They enjoy government subsidies by having much safer access to procurement and sales markets than earlier, and are enabled to implement their innovations quite easily, as well as to reduce their costs. All there results in external economies in all the sectors that consume or sell the products of agriculture, or supply agriculture. Beneficiaries are also the sectors of economy which can absorb the gradually released agricultural labour much more easily now, since they have got accustomed to work similar to industrial work.

Parallel to the modernization of agriculture, the consumer prices of foodstuffs have been rising more slowly in Western Europe, or only in a few cases have they been rising faster than whole-sale prices, since industrialization and the government-subsidized

integration forms have rendered sales simpler, eliminating several intermediate chain-links of trade and have, in general, made the agricultural market more transparent, in which there is no room for unexpected, short-term price speculations.

All this holds, of course, only for the domestic market of each country. In foreign trade price relations are different in so far as prices of staple agricultural products (cereals, meat, agricultural raw materials) are, as a rule, not determined by costs and, for a long time, there have only been a few advanced countries with certain special endowments (USA, Canada, Australia, New-Zealand), for which world market sales have been regularly profitable, owing to some highly up-to-date technologies. The producers of goods weighing little in world trade (vegetables, fruit, wine, special kinds of meat, processed food) could expect even earlier to have their costs recognized, of course, only on markets where they could gain a footing. In such cases, the selling of foodstuff takes place under the same circumstances as that of manufactured goods, which is to say that marketing, publicity, packing, and even fashion are elements of competition as they are in the trade of manufactured goods.

These processes had started in Western Europe before the Common Market came into being, and they had fully evolved before the agricultural protectionism of the EEC and the discrimination against staple Hungarian goods so gravely affected Hungarian exports. In fact, Hungary is the only country in Europe to have modernized its agricultural production so as to accumulate an increasing export surplus, while its products have not enjoyed preference on any foreign market. Yet we must discuss the tendencies prevailing in the food production and trade of Western Europe, because a lot of analogies are found concerning the circumstances of production, changes in costs, the importance of the agricultural sector, and the demands of those working in this sector. Among the Western markets of Hungarian food production, it is still the West European one that is the largest, and finally, because there, as well as on several other markets, Hungarian products compete with West European ones subsidized already for fifteen or twenty years.

The Hungarian system of subsidies, the price and wage-system, and the obstacles to the development of an integrated domestic market

It is possible to subsidize agriculture so as to orientate it towards such allocation of production and investments which renders it impossible to reduce costs. It may even happen that the government only pays, subsidizes, remunerates and stimulates, but does not actually promote those organizational processes, nor does it establish that institutional framework in which the modernization of production and trade could take its course without undue expenses. We think that while in Hungary the amount of the necessary subsidies is very little, there are too many subsidies falling into one of the above-mentioned two categories.

Most of the Hungarian agricultural prices are fixed by the state. They are neither input-proportional (cost-determined) in the sense as is the West European price system, nor competitive in that they would be comparable to the world market prices of products of the same value (quality and destination). This price system is complemented by a system of subsidies basically different from the West European one.*

The Hungarian system of subsidies differs from the West European one. It does not support prices to cover costs, but supports agricultural production as it is, with an increasing discrepancy between costs and prices. Furthermore, it maintains the income parity of those living from agriculture while the gap between prices of agricultural and industrial production is rather widening than closing. Only a slight portion of the subsidies granted to farms is directly aimed at technological development and expansion of production. All the rest is meant to recognize costs of simple reproduction—wages, materials, depreciation—and a certain amount of profit, which the farms can use as their own contribution to investment. From all that it follows that without subsidies probably only a fraction of today's agricultural production could be maintained which runs contrary to any economic considerations. Therefore the Hungarian system of subsidies and the price system does not give any indication for distinguishing competitive and protected production, or to draw, even approximately, the line between the two.

The fact is that, if it were to turn out that Hungarian agricultural production on the whole, and on several years' average, does not receive any external subsidies (coming from other sectors), there would be nothing to be astonished at. It does not follow, however, from a possible lack of real subsidy, that the apparent subsidy is efficient—the latter could only be measured by the competitiveness of the given production.

Reference is usually made to the low consumer price level of foodstuffs, as the main explanatory factor of the prevailing agricultural price level. We do not hold this to be satisfactory, since, even with the prevailing low consumer prices, wages and salary earners spend about half of their income on foodstuffs.

Therefore, we have to say that it is the wage level that is extremely low in Hungary. This statement is further supported by the comparative analyses indicating that within the cost structure of industrial production wages rate much lower than in the Western countries investigated, and, if the results received by the usual conversion of nominal wages were reliable, the Hungarian real wages would turn out to reach a quarter or a sixth of Western European real wages, which would obviously be wrong. This leads to the conclusion that the purchasing power of the forint paid in wages is higher than that of the forint spent by industry on raw materials and investment. How is this possible?

It is only possible in a way that nominal wages do not provide coverage for a part of the costs of commodities and services purchased. It is easy to find out, which are these

*Meanwhile, it should not be forgotten that protectionist systems have reduced the cost sensitivity of management everywhere. even in the most advanced countries. It is difficult to mark out the limits of subsidized development if that development is successful; and the limits of protection of the domestic market, if it is agriculture that is involved. Perhaps these limits are running where the cost sensitivity of agriculture is already lower than that of the attached sectors.

commodities and services: rented flats, public transport, communal and infrastructural services and, as the largest item, foodstuffs.

In 1946, when the forint currency was introduced as an instrument of economic stabilization, wage level was set to purchase a very little amount of food, and the price scissors between agricultural and industrial products opened even wider than before the war. While agricultural incomes were directly or indirectly taxed away, the difference between wages to be spent on food and their costs of production appeared as a direct accumulation of industry. And then time came when this difference had to be recycled into agriculture, partly or totally, at times at a decreasing, at times at an increasing rate, at times rather abruptly. The source of subsidies is partly in the accumulation originating in the wages kept low artificially. (Another source is, of course, the taxing away of a part of agricultural incomes.) As it is known, the system was maintained even after food shortage in Hungary had ceased, and an increasing amount of food could be bought for the very slowly rising wages.

It also follows from the preceding that since the mid-1960s when the present system of subsidies was established and became consolidated, the industry could (presumably) produce (or acquire from external sources) its own accumulation, without drawing it away from agriculture, and without the fluctuations of real wages because of food shortages of a varying intensity. What is more, it is exactly in the past 15 to 18 years bringing quite an unparalleled upswing of agricultural production and an almost complete parity of industrial and agricultural incomes, that the consumer forint—that is, the wages paid in industry, tertiary sectors and agriculture—became more valuable than the forint circulating in other spheres of the monetary system (investments, circulating capital etc.).

Labour is employed by every producing and servicing sector, including agriculture, and agricultural products serve as inputs for several industries. Only if this is well considered, shall we understand, to what extent the difference between costs and the sales prices of agriculture distorts the input structure, relative incomes, and export efficiency of each sector of the whole economy.

The consequences of the agricultural price system and of the related system of subsidies spill over to the sectors linked to agricultural production in other ways just as well.

For the sectors supplying inputs for agriculture—the chemical and engineering industry—agricultural farms are a negligible market segment; their sales depend on the demand of farms only to a small extent and only through the authority granting subsidies. It is, therefore, easy to understand that fluctuations in the agricultural market also fall to induce these sectors to stabilize demand for their products with their own means and by promoting vertical integration. It is again because of the system of subsidies that only when exporting do these sectors notice whether costs are proportional or not to the utility of their products.

The purchase prices of the food processing industry and foreign trade are usually not equal to the sales prices realized by agricultural producers (increased by subsidies),

and have nothing to do with the real costs, but are, as a rule, lower than both. They provide data on which the processing, wholesale, and foreign trade enterprises make their calculations, determine their profit, taxes, and refunds. The agricultural price system not having been reformed either in 1968 or later, farms do not sense the changes in foreign markets through information received from trade partners, or prices, but only through the mediation of the system of subsidies.

Thus, we have a sector of primary importance: agriculture, whose demand is unable to give impulse to the development of other sectors, and which is reached by impacts of domestic economy and those of foreign markets only through several mediating instances; it is not duly integrated into the domestic market and is separated from its export markets.

* * *

The consequence is quite easy to see: under such circumstances, enterprise autonomy and decisions cannot play any important role in adjustment to demand on either the domestic or the foreign market. This makes it necessary that decisions on production and sales, inputs, and technologies should be made by a central organ. This center again will have a global view of production only if the pieces of information can be related to a relatively small number of homogenous activities and to a limited number of homogenous enterprises. The circle is thus closed: competitive organizations cannot even be tried, while the trends of specialization and the choice of markets become increasingly, almost completely, determined.

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ОГРАНИЧЕНИЯ ЭКОНОМИЧНОГО РОСТА И ЭКСПОРТА В ВЕНГЕРСКОМ СЕЛЬСКОМ ХОЗЯЙСТВЕ

К. ЛАНИ

Благодаря достижениям венгерского хозяйства за прошедшие 15—20 лет страна не только обеспечивает свои внутренние потребности в важнейших видах продовольствия, но и производит все большее количество продукции на экспорт. Большая часть этой продукции — так называемая массовая продукция — в основном зерно и мясо, а рынками сбыта этой продукции все более являются социалистические страны, тогда как эта отрасль потребляет все больше импорта из капиталистических стран. Таким образом, развиваются не те виды деятельности, которые могут удовлетворить спрос развитых и развивающихся капиталистических стран.

Автор объясняет рост сельскохозяйственного производства хозяйственной реформой, а специализацию без учета условий страны и аспектов конкурентоспособности на внешнем рынке — приостановкой проведения реформы. В последней особую роль сыграли многократные реорганизации и укрепления сельскохозяйственных предприятий, в результате которых возникла крайне поляризованная структура производства: около полутора тысяч крупных хозяйств и около полутора миллионов карликовых хозяйств. Внутренняя организация крупных хозяйств такова, что производственные решения отделены от рыночных решений, непосредственно занятые в производстве работники не имеют представления о дальнейшем пути своей продукции, не может идти даже речи об организации жизнеспособных предпринимательств, для которых требуются рамки средних или мелких предприятий.

Система сельскохозяйственных дотаций и цен такова, что импульсы внутренней экономики страны и внешнего рынка доходят до сельского хозяйства лишь через ряд опосредующих этапов, в то время как спрос сельского хозяйства также не способен служить стимулом для развития других отраслей; сельское хозяйство недостаточно интегрировано во внутренний рынок и изолировано от внешнего рынка.

Конечный вывод статьи состоит в том, что в этих условиях автономные решения предприятий не могут играть определяющую роль в приспособлении к спросу внутреннего и внешнего рынков. Принятие решений неизбежно сдвигается на высший уровень управления экономикой, откуда лучше обозримы как производство, так и рынок. Однако ценой такой обозримости является существование лишь небольшого числа видов однородных деятельностей, типов однородных предприятий. Направление специализации и выбор рынка тем самым становится заведомо детерминированным.

À PROPOS THE EXPLANATION OF SHORTAGE PHENOMENA: VOLUME OF DEMAND AND STRUCTURAL INELASTICITY

K. A. SOÓS

The author examines shortage as a specific kind of scarcity — specific in the sense that potential users possess the titles, characteristic of individual economic systems, which would allow them to acquire the wanted goods and yet they cannot acquire them. What are these characteristic titles in today's socialist economic systems? This question leads to the investigation of the functioning of production and distribution. Both the institutional reasons for the inelasticity of production (supply) and the institutional difficulties of the efficient control of aggregate demand as reasons for shortages in today's socialist economies, are analysed.

The history of socialist economies so far has been accompanied by massive shortage phenomena.

To explain this commonly known fact, we ought to define in the first place what we mean by shortage. In the case of most contemporary Hungarian authors the term denotes *unsatisfied effective (solvent) demand*. I, too, accept this interpretation as *shortage in the strict sense*, and even as the only correct definition in terms of the current Hungarian economic mechanism.

For me, however, the starting point is the system of directive planning in the socialist economy and, accordingly, a *wider interpretation* of shortage. In countries with directive planning (thus prior to 1968 also in Hungary) it was also called shortage when materials—*secured in principle by administrative allocation—for the planned volume of production were not available*, and could not be procured. Of course, the monetary cover is generally institutionally secured for administrative allocations, thus, formally, this shortage as well comprises unsatisfied effective demand. Nevertheless, the essence of such a shortage is not found—and correctly—in the fact that “the enterprise has money but cannot spend it.” Namely, the products included in the scope of administrative allocation cannot, naturally, be had *simply for money*. Within the system of directive planning this type of shortage (which is a *fault of the mechanism of breaking down the plan*, and which has to be included in the wider notion of shortage) coexists with the shortage in the strict sense of the term, i.e. with the fact that producer and consumer goods, in principle to be had simply for money, are not accessible in reality.

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It should be clear that behind the above outlined ambiguity there looms a *regulation of economic activity according to non-uniform principles*. Let me add: we cannot speak about regulation according to truly uniform principles—about the *abolition* of the undoubtedly much suppressed command relations—even in post-1968 Hungary. Thus, in the following, when we shall examine the regulation not relying on uniform principles by setting out from the directive planning system, as *an institutional cause* of shortage, we shall, of course, also mention the problem of shortage under the new mechanism. Besides, I shall also try to clarify the relationship between my views and the conventional explanation of shortage, which sets out one-sidedly from the too large volume of aggregate demand. (The latter will be called the excess demand explanation of shortage.)

Shortage in an assumed non-monetary economy

Examining shortage in the context of a system of a directive planned economy, we neglect, as a first step, even the existence of money or of accounting in terms of money. The operation of enterprises is regulated by means of *plan-instructions in physical terms*, among them those that relate to the *product-mix*. Let us assume that a product provided for in the plan for the product-mix is not being produced. If, in addition, we assume, for a start, that the plans of production and utilization (of administrative product allocation) are in perfect harmony with each other, and, for the time being, also neglect the possibility that, in the wake of the non-fulfilment of the production plan, the plan of utilization is immediately modified, then the non-fulfilment in question is bound to produce a shortage in some field of utilization. It is not unsatisfied effective demand, but “purely” a defect of the mechanism of breaking down the plan (since, because in the assumed system there is no money, neither effective demand, nor its not being satisfied, have a place).

Is this necessary, that is, is the massive appearance of shortages in this sense a necessary occurrence in a socialist economy “free of money?” No doubt, it is.

Although in the past attempts to organize a socialist economy without money had only lasted for a short time and only under “disturbing” (civil war) conditions, as much as we know about these “experiments” is sufficient to say that they were in themselves incapable of functioning—partly in consequence of massive shortages.

Experience with the system of directive planning, already employing money, also appears to confirm that the mechanism of breaking down the plan itself creates shortages. Identifying shortages always with the non-fulfilment of the plan for the product-mix, we can establish in the first place that such (partial) non-fulfilment is quite general. Let me refer at this stage to experience in the Hungarian and Polish textile industries (of course, in times of directive planning).^{*} And let me add that to plan the product-mix, to organize

^{*}For the Hungarian experience see [1]. In the Polish cotton industry the planned and the actual product-mixes only coincided for 15–40 percent of the specified volume of output [2].

plan implementation, to survey the technological processes "from above", to judge whether complaints by enterprises which do not fulfil plan targets about shortages of materials etc. are justified or not, is in most other industries even harder for the planning agencies than in the textile industry. (Let us only consider the engineering or chemical enterprises, or the higher vertical stages of metallurgy etc. where, in spite of every effort to create "clean production profiles", the structure of production is mostly diversified.) These are tasks that cannot be implemented in practice (more precisely, they can only be implemented with gaps), a perfect implementation of plans relating to the product-mix is not possible.

The planning agencies react to the necessary uncertainty of planning the product-mix by distinguishing—formally or informally—between important and less important products; they cannot react in any other way. The hierarchy of such priorities is well known; they more or less guarantee that those implementing the plan should indeed manufacture these products, using factors of production in short supply for the purpose.

Such priority (more precisely its reverse: not giving priority) is nothing else but the institutionalization of shortage in the sense of non-fulfilment of the plan. Products included in the plan but not enjoying priority need not necessarily be produced.

This line of reasoning is, of course, also valid when there is no accounting in terms of money, and there are no commodity and money categories. Thus it also holds for a socialist economy dispensing with the use of money.

Producers in a directive planning system and effective demand

In a directive planning system using money as a unit of account as well as commodity and money categories further important elements find their way into the picture. Let us first consider the pure cases.

Under directive planning the total volume of production is regulated on the enterprise level through the indicator of gross value of output (in some socialist countries through that of total sales or, recently, of the net value of output). The planned gross value of output is frequently not completely covered by the directives relating to the product-mix. Besides, it relatively rarely occurs that they cover more than that (although—as a type of disharmony between the various plan indicators—this does happen), but the enterprise may also overfulfil its plan. In both cases the enterprise produces to the order of its customers (we assume that the customer has no liquidity problems, thus this is *effective demand*). Let me add: *horizontal effective demand*. I shall explain the meaning of horizontal in a minute. If the enterprise does not satisfy a demand of its customer then (neglecting now, for the sake of simplicity, the possibility that this demand may be satisfied by someone else), there will be a shortage, and, quite unambiguously *shortage in the strict sense of the term*, that is, unsatisfied effective demand.

Let us proceed and build up a more complicated case. As has been mentioned, the enterprise is not called to account with equal rigour for the non-fulfilment of every instruction relating to the product-mix. As a marginal case opposed to the very "tough" plan instruction with the strongest priority, also such soft plan instructions may occur, the non-fulfilment of which (that is, the possible neglect of producing some less important product) will not even be raised by the controlling authority, and the enterprise reckons with it not being mentioned. In such cases no more is due for the fulfilment of the instruction than the price. That is, we are again dealing with effective demand, and, if it is not satisfied, again with a shortage in the strict sense of the term, non-satisfaction of effective demand. This demand—since it comes from above, from the control agency—may be called vertical demand, thus distinguishing it from the horizontal demand of a subject (consumer, other firm) not hierarchically related to it. Let me stress, however, that I do not attribute any economic content to this distinction between horizontal and vertical demand. The term vertical demand wishes to highlight *the demand character of the plan-instruction*—and the purely demand character of the soft plan-instruction discussed; its economic meaning and its function do not differ from that of horizontal demand.

What is, indeed, the function of demand—either horizontal or vertical?

Discussing the cases of both horizontal and vertical demand, I have here assumed that an enterprise under the directive system of planning *may be* interested in producing something *merely because there is a demand for it*. Is this assumption correct?

There are several such regulators in the directive system of planning which stimulate in that direction. Such are the plan instruction relating to the gross value of output (to total sales, to the net value of output), and stimulation for its fulfilment and overfulfilment; the incentives for the fulfilment and overfulfilment of the profit plan etc. To a minor or major degree these regulators also aim to stimulate enterprises to satisfy demand. Thus, e.g. it would not be in the least necessary to prescribe the value of gross output if the output of the enterprises could be completely covered by plan-instructions relating to the product-mix, for which they are strictly called to account. The message of the indicator is that the control agency cannot completely define *what* the enterprise should produce, only *how much*. It ought to produce *what it can sell*. It is, of course, common knowledge that in order to satisfy this indicator enterprises frequently produce things they cannot sell. This is an explanation for efforts to replace gross value of output by total sales as an indicator, but the latter also has its drawbacks. The possibility of producing for stockpiling is also limited in the case when the indicator of gross value of output is applied. This is not the place for a detailed discussion of every aspect of the problem*, but let me note that the indicator of gross value of output (and some other indicators) *introduce elements of the commodity-producing mechanism into the system of directive planning*.

*This problem, and also other problems treated in this article, are discussed in greater detail in the paper [3] by the present author.

The thus emerging, specific and highly restricted, commodity relations obviously contribute to securing the working of the system of directive planning. From the viewpoint of our subject the substance of the matter is that, beside the mechanism of breaking down the plan, necessarily generating shortages, another mechanism as well enters the process of creating harmony between production and the demand.

This particular commodity mechanism is, of course, far from being free of contradictions. Its main internal contradiction can be explained by setting out from what an American author has termed incrementalism. Under the directive system of planning, plan tasks are related to the level attained in the preceding period, that is, to the base. This is a well known and often chewed problem. The enterprise will not fully exploit its possibilities for increasing performance because a level once attained will be made into a compulsory minimum for the next period and, in the absence of withheld potentialities it could hardly exceed that (it might not even be able to maintain it). This also holds for increasing profit, for the formation of reserves for increasing profit, and for other indicators as well. Let me add, the problem is not always that enterprises restrain themselves when overfulfilling the plan. We have to discard every "abstraction" alien to life, belonging to the textbook form of the system of directive planning. In reality, enterprises frequently do not make efforts not only to overfulfil but even to fulfil the plan, in the absence of a severe sanction attached to non-fulfilment. Everyone is also familiar with the ulterior modification of plans, their adjustment to expected and even to actual performance. It even occurs that enterprise plans are modified after the end of the plan period.

On the basis of what has been just said the proposition that an enterprise may be interested in satisfying effective demand under the system of directive planning, may be complemented by stating that it may also be *interested in not satisfying it*—that is, when its satisfaction is not expedient for the reasons discussed above of planning tactics, because it would result in too high a base for the production or profit plan of the following year (quarter etc.).

Shortage in the system of directive planning: the structural (institutional) inelasticity of supply

Thus, although production to demand as a mechanism of adjustment of production to the demand for products functions in the system of directive planning, it necessarily functions in a way that also produces massive shortages.

To sum up what has been said, one should add that plan-instructions in physical terms also have a harmony-creating function and, simultaneously, they generate massive shortages (as has been said, of shortage phenomena in a different sense). But now, after what has been said about vertical demand, it can no longer be put in this form without violating elemental rules of logic. Plan-instruction can be purely effective demand, as has been stated, in an extreme case (vertical demand, but the term vertical has no economic

content here). In more general terms we have to say that in a real system of directive planning which uses money as a unit of account, and applies commodity and money categories, production instructions in physical terms always comprise (vertical) effective demand (an implicit promise related to the settlement of the price of the future product). Thus, we cannot mention plan instructions in physical terms as something additional to effective demand, only its priority-element—necessarily asserting itself inconsistently and partially—that is, the changing force of the coercive instruments attached to fulfilment.

Further, similarly on the basis of what has been said about vertical demand, the separation from each other of the two kinds of shortage becomes rather relative. As indicated in the introduction, shortage always means unsatisfied effective demand or, rather, always means this too, since formally it also means this, too, even when its substance is that the plan-instruction, formulated in physical terms, is not fulfilled in spite of the attached coercive instruments.

Therefore, our correct summary is the following: The enterprise is motivated to satisfy the demand for products under the system of directive planning partly by the fact that they embody *effective demand*, and partly because this satisfaction (the manufacture of products defined in the plan instruction in physical terms) is backed by *coercive measures*.

Both motivations are uncertain. The force of coercive measure varies. (In the case of horizontal demand—that is, if there is no plan-instruction in physical terms—and in the pure case of vertical demand there is no coercive instrument at all.) The enterprise may also be motivated not to satisfy effective demand, instead of satisfying it. The two kinds of, equally uncertain, motivations may partly *reinforce* each other, since (apart from the case of horizontal demand and the extreme one of pure vertical demand), both are linked to satisfying every demand for a particular product. *This reduces uncertainty*. But the two kinds of motivation also *weaken* each other. The effort at fulfilment, overfulfilment or at avoiding excessive overfulfilment of indicators stimulating the satisfaction of demand (gross output, profit, etc.) may prompt the enterprise to deviate from the prescribed product-mix: to produce products of higher profitability than what is prescribed, or—just in the case of short-term effort—less material-intensive goods, of course, only if it need not reckon with too strict sanctions. In some cases the coercive measures linked to the plan-instructions may prompt the enterprise to manufacture less material-intensive products or products demanding an unfavourable combination of resources in short supply and of those available in abundance. On account of this, it may achieve a smaller total output than intended or even than the one provided for in the plan, thus it can satisfy less of the aggregate demand, as well. Thus, the two kinds of motivation also weaken each other and uncertainty increases on this account.

In the last resort we have here *an uncertainty of effort at satisfying demand* (plan-instructions defined in physical terms and the horizontal demand) which is unknown in the microeconomics of capitalist firms. It is nothing else than the *structural inelasticity of supply*. It is structural (institutional) in the sense that it derives from *the structure of regulation*, from the double, and doubly uncertain, system of the latter.

But this structural inelasticity is *not restricted to the product-mix, it also relates to the size of aggregate production and supply.*

In the sense that both the structure and the total volume of supply are inelastic and more or less given as against demand, my argument is related to János Kornai's explanation of shortages. I also follow Kornai in that I set out from the behaviour of the enterprise and get from there to the inelasticity of supply. (Further, I follow him also in that I do not attribute a primary importance to personal consumption in the coming about of shortages; I shall only briefly touch upon this sphere.)

I, however, interpret that enterprise behaviour which occupies a central position in a way that differs from Kornai's. Kornai sets out from the assumption that the enterprise manager *identifies himself with his function* and, in his opinion, the function with which the manager identifies himself is basically *quantitative performance, that is, raising the volume of output*. Kornai's conclusion is that in increasing production the firm goes right to the limits set by constraints on resources, (of course, always only up to those set by the narrowest bottleneck), thus the volume of supply is inelastic in the sense that it cannot be expanded because it runs up against the constraints on resources.*

The conclusion itself, the theory of an economy subjected to the constraint of resources, is of course, old-established. Kornai breaks with its traditional justification. According to the traditional explanation *it is the superordinated planning agencies that force* enterprises to increase production to the limit of possibilities. There are two weak points in this explanation. One of them is that planning and practice aimed at such high-tension raising of production beyond every conceivable limit and at any price is not a general practice even in the system of directive planning. Kornai rightly points out that this practice is asserted "only in certain historical circumstances." [5]

Unfortunately this is problematic even from the viewpoint of Kornai's argument. Namely, if the expectations of the control agencies are not concentrated exorbitantly on quantitative performance, it remains unexplained why the enterprise manager himself finds his own function to be basically this. Kornai, when discussing the problem of motivating managers in general terms, does not restrict this function, nor identification with it, to quantitative aspects: He mentions that this function, that is work done properly, for which the manager strives, also includes requirements concerning product quality. In later sections however, he speaks about the weakness of efforts to improve quality, arguing that customers are willing to accept goods of poorer quality. [6] But, after this, and having made by this the role of identification, with the function of work done properly a strongly relative requirement at this point, it becomes questionable whether this motivation can provide a satisfactory explanation for increasing production up to the limit set by physical possibilities.

The other weak point of the traditional justification of the theory concerning production increased up to the limit set by resources is that it abstracts from a

*"... usually... with the traditional socialist firm it is the resource constraint... that is binding". (Kornai, J. [4]).

commonplace fact, frequently mentioned in the debates about the economic mechanism and also quoted above. It is precisely stimulation for higher performance (and within it, of course, for increasing quantitative performance) that evokes from enterprises such efforts to withhold performance which the control agencies may contain but cannot, in general, eliminate. This argument refutes not only the traditional justification of the theory concerning the resource-constrained economy, but the theory itself. It also refutes Kornai's argument, because it demonstrates that the aim of the enterprise *cannot be* an unlimited increase in production. In constant bargaining with the control agencies the firm needs reserves for increasing production. The true function of the manager, with which he has to identify himself in order to remain in his position, is to no small extent precisely the securing of these reserves.

The volume and structure of supply (its structure e. g. in respect of efforts to improve quality) is thus inelastic without, in general, running up against constraints on resources; the inelasticity is explained by the above analysed institutional problems of regulation. With such an—institutional—interpretation of the inelasticity of supply an emphatic role is accorded in my explanation of shortages *to the supply side* (the role of the latter has been underlined, with an essentially similar argument, by Róbert Hoch).^{*} And this is my main argument against Kornai, who, having determined aggregate supply at the level of constraints on resources and having derived the inelasticity of the structure of supply (the weakness of efforts to improve quality) from the feather-bedding effect of excess demand, deduces shortages onesidedly *from the excessive volume of aggregate demand*.

My emphasis on the institutional inelasticity of the supply side does not imply a denial of the fact that shortages are always unsatisfied effective demand. Therefore, the role of the demand side also has to be investigated.

Demand control and shortages in the system of directive planning

I mentioned in the introduction that shortages are mostly only formally unsatisfied effective demand in the system of directive planning (outside the market for consumer goods). If an enterprise can lay its hands on an administrative allocation of material and yet it cannot buy it because it does not exist, the substance of the shortage is not that the money cannot be spent; in this case money plays a subordinate role. Such a shortage may

^{*}In his review of Kornai's *Economics of shortage* Hoch confronts Kornai's statement that it is in the interest of the firm to increase production beyond every limit, with the fact that, under the conditions of the system of directive planning (and similarly, under the new post-1968 Hungarian economic mechanism) the interest of the firm is—mainly because of the "incrementalism", to grow at any price, yet not too much. This is a factor restricting the market competitiveness of enterprises, that is, a factor explaining shortages [7].

come about in two principal ways: either the production plan of the material (in more general terms: of the product) is not fulfilled, or the plans of production and allocation are not in harmony with each other. From the supply side aspect the two cases are quite different (I neglected the latter when discussing the supply side), but from the viewpoint of the demand side they are not truly different.

If, namely, supply cannot be increased, the elimination of the shortage demands, in both cases, a reduction of the distributed quotas (of demand). Owing to deficiencies in computations and data supply, the competent planning organs are not always aware on time of this necessity. This is only apparently a purely technical problem—one that may be solved e.g. by computerization. It *may be* (but is not necessarily) in the interest of the producer to announce the non-fulfilment of the plan well in advance. And as for the potential user, he might perhaps fare better by queuing owing to the shortage, practising corruption etc. instead of a reduction of quotas that also affects his claims. Thus he, too, might be interested in concealing expected shortages.

Of course, that case has to be investigated, too, when it is known that the quotas ought to be reduced and yet they are not reduced, and when (not infrequently) *deliberate over-allocation* takes place.

The anatomy of such, more or less deliberate, “planning mistakes” is thoroughly analyzed by Tamás Bauer [8]—first of all in the over-allocation of investment goods. The elimination of these “mistakes”—involving a reduction of the quotas—is contrary to the interests of those to whom the quotas belong. The latter—managers, heads of branch directorates etc.—set their socio-political weight against this reduction the threat that with fewer resources they can only offer lower production or service performances.

It can thus be established that, frequently, over-allocation is difficult to avoid. One may also add that an effort to avoid over-allocation *cannot always be considered as absolutely rational*. In order to decide which user quotas have to be reduced, the planner ought to perform efficiency comparisons between the various user areas without possessing undistorted data, an adequate methodology or even a uniform, operational, notion of efficiency. (It is no mere chance that no uniform notion of efficiency, nor its computation methodology have evolved in the system of directive planning.) Thus, it is not unambiguously irrational, to entrust decision to those spontaneous adjustment mechanisms (queuing etc.) and not to an administrative elimination of over-allocation, which evolve under the conditions of shortage that derive from over-allocation. (Although, the latter solution is no doubt irrational in the sense that it amounts to a disguised admission of the inefficiency of directive planning.)

Bauer deduces shortages within the system of directive planning (first of all shortages on the investment market) from the over-allocation of quotas. On this basis he critically comments on the *softness* of the enterprise's *budget constraint* emphasized by Kornai, which is the core of Kornai's explanation of shortages (since he derives from it the “almost insatiable” demand of the enterprise for inputs and thus also too large aggregate demand). This is what Bauer writes:

"Let us notice that the softness of the budget constraint—from which the shortage in respect of investment, material and labour inputs is equally derived—means that, in a planned economy, the constraint does not operate whose task it is not really to regulate the use of resources in a directive planned economy. After all, this task belongs, in a directive planned economy, to quotas broken down in the plan hierarchy, together with the plan targets, beside which financial instruments are accorded, at most, a complementary regulating role." [9]

This critique is not really well-put. It is not because, in its explanation of shortages, it remains with the onesided emphasis on the role of demand; but not even its handling of the demand aspect is fully acceptable. Financial controls are always aimed at controlling the use of resources—in some important fields this is precisely the main or exclusive goal. It is, of course, true that in a system of directive planning this is not what primary regulation is about. But the "at most complementary regulating role" is certainly an exaggeration, and Kornai's question, why money does not effectively regulate, cannot be considered unjustified from the start.

In answering this question we still have to set out from administrative allocation as the primary regulator. The financial control of the use of resources is not efficient enough, not simply because it is secondary when related to the former, but because the former *disturbs its efficiency*. Let us only remember e.g. the system of material allocation. The main financial regulators affecting it are the planning of costs and of profits as well as the financing of circulating assets. Are the financial control agencies allowed to apply such rigour in these areas—in planning, and in controlling plan fulfilment—which prevents enterprises from procuring and building into their products the materials administratively allocated to them?

This question cannot be answered either by an unambiguous yes or an unambiguous no, and this reflects the real complexity of the problem. In the system of directive planning the control agencies make efforts to prescribe strict financial indicators and tasks, making them "tense", controlling their fulfilment, in order to prompt enterprises also through these to mobilize their reserves, that is, also to reduce the use of resources. Such efforts at tightening, however, necessarily find themselves in conflict with the bargaining power of the enterprises represented by indicators defined in physical terms.

This does not, however, cancel the effect of financial regulations. It is the financial regulators—essentially only these—which restrict the use of such resources (e.g. materials) to which the administrative allocation does not extend. They also exert some effect, of varying strength, on the use of such resources which are administratively allocated. It strengthens, for instance, in periods when, in the wake of tensions in the supply of materials—usually released by a rapid increase in investment—campaign-like measures are taken to tighten the financing of circulating assets.*

In consideration of these, Kornai's notion of the soft budgetary constraint does not appear to quite fit the bill. His related argument is in part exaggerated. E.g. with his

*Measures taken in several socialist countries to this end are reviewed in [10].

statement—formulated, let us note, only hypothetically—that “the existence of a supply of real inputs and the using firm’s intention to purchase are usually enough justification for the bank to grant credit for the transaction” [11], describes the activity of banks as quite passive, and almost automatic; this is not fully corroborated by empirical evidence.* Thus of Kornai’s reasoning in connection with the soft budget constraint let us accept rather *the references to uncertainty than those relating to complete softness*:** the manager can, in general, not feel confident that he can shift the detrimental financial consequences of his economic decisions, without sanctions being applied to him, (to the state, the Bank or, through prices, the customers)—nor can he be certain that he cannot shift them.

Thus, we find, also on the demand side, a double, and doubly uncertain, regulation. Regulation is inflexible and clumsy; its clumsiness is, however, *much more* visible in the restriction of demand (that is, it eliminates shortages more clumsily), than in the allocation of superfluous products—similarly deriving from inflexibility—since the latter is less hindered by vested interests and, therefore, the authority of higher agencies is not needed. Surpluses are frequently allocated also by a more subordinate agency than the one actually in authority—in the expectation of ulterior approval.

This onesided upward elasticity of demand *derives from the particular mode how demand is regulated* in the system of directive planning; at the same time, it also implies *adjustment to the institutional inelasticity of the structure of supply*.

Thus we have to look for the cause of shortages to the many kinds of faults of the complicated operational mechanism of the directive planning system. The soft—more correctly: uncertain—budget constraint is only part of them. And even this leads to shortage not merely by making the volume of demand difficult to control. Such an explanation of shortages—setting out from the volume of demand—becomes problematic from the empirical point of view when it is confronted with experience of powerful demand-restricting campaigns. In Hungary, e.g., in 1961 and 1964, aggregate demand and domestic consumption in the principal areas diminished and, in consequence, a considerable increase in inventories took place [14]. Yet the shortage phenomena, though becoming less frequent, did not cease.

Such periods of demand restriction point to a (positive) *correlation between the volume of demand and the degree of shortage* but, at the same time, the role of inelastic supply is made obvious in the shortage. This, too, can partly be traced back to the uncertain budget constraint, since, e.g., the above discussed tactical bargaining about the profit plan is an element precisely of the uncertain budget constraint and from this it (partially) follows that the enterprises make little effort to adjust their output to effective demand, even if demand is just being powerfully restricted.

*Cf. [12] where the author reviews, relying on autopsy, the bank control of enterprise activities in the GDR and Romania.

**See e.g. what is said under the heading “Uncertainty”, as group IV–S of consequences of the soft budget constraints [13].—I have discussed the problem of soft budget constraints in detail in my article [14].

Shortage under the new economic mechanism

At this point we may pass on to discussing shortages in the new mechanism. The inconsistency of the interest in profitable management and, deriving from this, of efforts at satisfying effective demand, is even more important here for the explanation of shortages than in the system of directive planning. In the latter, the primary role is played by different (directive) adjustment mechanisms; and satisfaction of effective demand is itself promoted not only (and not even mainly) by stimulating the increase in profits, but also by prescribing the value of gross output. All that is, however, obviously no longer valid in Hungary after the 1968 reform. In principle, it is basically the effort at profitability that has to motivate the firms to satisfy effective demand. In addition, the effort at profitability, in principle not related to the attainment or surpassing of some level of profit determined from above, that is, in principle, there is no tactical manoeuvring, the enterprises are not interested in holding back their possibilities for increasing profits. In principle, that is so, since it was obvious already at the introduction of the new mechanism that intensive interest in profit can only be achieved in this manner (that is, without plan-manoevring, incremental interest).

It is, however, also known that in the real world the profit and its regulation (although formally not subject to the plan directives) are not free of similar tactical elements. Through "breaking down the regulators", gathering momentum mainly from 1972, and "breaking down prices", partly from 1975 onwards, but mainly from 1980, the control agencies made efforts to set the profit of sub-branches, and frequently even of individual enterprises at a level corresponding to "the profit intended to be left with the enterprises".* This may lead to shortages even in—the otherwise not too frequent—case of the market of individual products and groups of products if several, in principle competing, sellers are simultaneously present.

The thus faltering operation of the income motivation of satisfying demand is, of course, complemented by the well known system of social expectations and "responsibility for supply". But these mechanisms, even if they help in reducing the intensity of shortages, exist in fact in close mutual interrelation with the latter.

It is a less important aspect of the interrelation that the basis of these mechanisms is a shortage, or a shortage that just misses in occurring. The more important aspect is that these mechanisms, paradoxically, yet obviously necessarily, lead regularly to minor or major shortages. Surely, an enterprise "responsible for supply" can acquire additional resources most safely if there is a shortage of its products on the market (the usual case is that there is a shortage while the enterprise withholds performance and conceals it to the supervisory organ).

In general, under the new mechanism, the additional resources in question are acquired—much more frequently than in the old mechanism—through acquiring money (budgetary allocation, tax rebate, credit) or by the approval of a higher price. and here

*This problem is thoroughly analyzed by László Antal in [16].

the viewpoint of profitability—or, in the case of a change in price, adjustment to the foreign trade price—play a greater role. Yet, in spite of this enhanced role of profitability, it is mostly valid that the firms—as responsible agencies for supply defined in physical terms—obtain favours and monetary assets against performances and promises measured in physical terms. It is essentially such a kind of effort at the allocation of means (mixed, of course, on account of the uncertainty of allocation criteria, with institutional and personal contacts) that we find at the back of the above discussed regulation with the help of “regulator-breakdown” and “price-breakdown”.

In the last resort, the substance is the same as in the system of directive planning: the intention *to produce to effective demand is disturbed*—in spite of efforts to provide assistance (let us remember the supply responsibility)—*by elements of another adjustment mechanism of the directive type. Supply is structurally (institutionally) inelastic* in adjustment to effective demand.

This inelasticity is interrelated with fixed prices. Since production does not sufficiently sensitively respond to changes in profitability, a wider application of free prices would entail considerable danger. But fixed prices are themselves factors in elastic supply—since production is *not totally* insensitive to profitability, thus free prices would somewhat improve adjustment.

The problem of largely fixed prices leads us to the interrelations between the *demand* side and shortages. Since consumer's demand is unambiguously sensitive to prices (in Kornai's terminology, the budget constraint of the consumer is hard), fixed prices no doubt have an important role in the structural rigidity of consumer demand. Under such conditions, in fields where excess demand prevails, the mechanisms of “selection” are shortage, the resulting queuing, forced substitution etc. (All that holds, of course, for consumer demand also in the directive planning system.)

With other elements of domestic demand, mainly as regards materials, intermediary products and investment goods demanded by enterprises (and, because of export subsidies, in respect of demand for export) sensitivity to price is not so unambiguous. Since, however, in Hungary today we can speak about a soft budget constraint in the strict sense with an even less justification than in the system of directive planning (Kornai also mentions that the reform has “somewhat hardened” the budget constraint of enterprises),* a certain sensitivity to price still exists. Thus, as was the case when discussing the supply side, I have to be ambivalent. On the one hand, if prices were liberalized, there would be no really effective constraint on price rises on the demand side either. On the other hand, fixed prices do have a role in the rigidity of the structure of demand, although this role is not so important, because of the lesser sensitivity to price, than in the case of consumer demand. To the extent an enterprise as buyer is insensitive to price, the structure of its demand for inputs is determined by the technological requirements of its production, by its efforts at building up reserves etc.

*Cf. [17]. Kornai also mentions a certain price sensitivity of enterprises, emphasizing—with a convincing argument—that price sensitivity is greater in respect of output prices than input prices [18].

The here outlined *factors in generating shortage, deriving from the system of management under the new mechanism, are less intensive than those corresponding to them in the system of directive planning*, discussed in the earlier part of this paper. Two main differences should be stressed in this respect. On the one hand, the system of "supply-responsibility" and social expectations is less in conflict with efforts to satisfy effective demand than the physical breaking down of plans under the old mechanism, which also means an implicit promise of payment in the old mechanism: If the enterprise produces what it has been instructed to produce, it can, in general, not suffer any loss—regardless of sales possibilities. This generally does not hold for "supply responsibility" that is defined in uncertain terms in the new mechanism,—in fact, and not incidentally, it does not even exist officially. The firms trying to carry out the prescribed supply tasks and which accumulate unsaleable stocks, mostly carry the risks of such transactions themselves.* Thus, the duality of demand (for products) and shortages described for the system of directive planning cannot be related to the new mechanism. Production is here much more oriented by effective demand than in the old mechanism.

The other important difference derives from the fact that the use of administrative methods in the micro-level allocation of products has been considerably relegated to the background. Their role cannot be compared to the situation before 1968, even after their strengthening from 1972 on and their spreading in the early eighties. The inelasticity and clumsiness of the administrative allocation of products is onesided, it mostly affects the elimination of shortages, but hardly hinders a rapid distribution of possible surpluses. As against that, the allocative role of prices is not as extremely onesided in the new mechanism. Although prices are rigid downwards essentially only because a firm could hardly raise again a price once it has been reduced, this is already enough for the orienting role of prices to produce not only shortages but also surpluses. Besides, the role of the credit system, important in the allocation of resources, is not as extremely onesided, either. Under the directive planning system it is very difficult to refuse credit to an enterprise possessing a material allocation. As against that, for a post-reform Hungarian enterprise, the "necessity" of material and other purchases deriving from the vague and undefined "supply responsibility" provides a much smaller bargaining power (yet not one to be underestimated) in negotiations with the Bank.

Since thus the budget constraint of enterprises is not strictly soft (much less so than in the system of directive planning), the aggregate demand of enterprises can be, and is, regulated. This regulation is of varying intensity. In periods of cyclical investment booms it asserts itself very weakly. But regulation is strict in such periods (the corresponding phenomenon has been pointed out also in connection with the system of directive planning), when, in the wake of the cyclical booms in question (in 1968, 1972–1973, 1976) temporarily or (from 1979 on) for various known reasons economic policy restrains growth for a longer period; one of the main instruments of restraint is the curbing of demand.

*The problem of responsibility for supply is discussed in detail by Iván Schweitzer in [19].

The fact that these restrictions of demand ease shortages only little and not everywhere, of course, causes problems for the explanation of shortages that derives them onesidedly from excessive quantitative demand. (This has already been pointed out for the directive planning system.) In connection with the developments in Hungary after 1979, Kornai showed that the extensive persistence of shortage is related to the limitation of supply owing to the administrative restriction of imports [20]. Following the analysis by Miklós Riesz, one may add that a similar effect follows from such a restriction of credits for circulating assets which is carried out not (or not only) with the help of higher rates of interest, but by restricting credit granted to some (creditworthy) firms, since this prevents production that would satisfy effective demand [21]. It has also to be noted that similar, though less strict, measures restricting credit and imports had also been taken in the course of restrictions implemented after the above mentioned excessive investment booms.

The fact that the curbing of economic growth has been accompanied by restrictions not only of demand but also of supply is partly a consequence of the shortage economy nature of the Hungarian economy, of the insufficient demand-orientation of production (the problem is, indeed, that the regulation of demand is in itself not enough to change the course of economic processes), and partly—here I agree with Kornai—it is also a cause of shortages remaining intensive even in the wake of restrictions.

There are, however, supply-restricting elements far exceeding the periodical restrictive measures in question, in the present economic mechanism of Hungary (and *a fortiori* in the directive planning system). All that has been written about the structural inelasticity of supply, about the clumsy adjustment of its volume and structure to demand, is indeed not more than a presentation of the demand-restricting impact of the economic mechanism.

Therefore, the transformation of the economic mechanism, the creation of a coercive situation for profitable enterprise management (in Kornai's terminology: the hardening of the budget constraint) might contribute to an overcoming of shortages not only by creating opportunities for a more effective control of demand, but also by eliminating the institutional inelasticity of supply.

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К ОБЪЯСНЕНИЮ ЯВЛЕНИЙ ДЕФИЦИТА: КОЛИЧЕСТВЕННЫЙ СПРОС И СТРУКТУРНАЯ НЕГИБКОСТЬ

K. A. ШООШ

В статье рассматривается проблема явлений дефицита, наблюдающихся в социалистическом плановом хозяйстве, как в условиях директивной системы планирования, так и в условиях венгерского нового хозяйственного механизма. Автор стремится к вскрытию связи явлений дефицита с хозяйственным механизмом (системой функционирования экономики).

Автор оспаривает взгляды, которые сводят объяснение дефицита к тому, что центральное руководство экономикой не может или даже и не хочет сдерживать совокупный спрос в должных рамках. В статье подчеркивается роль предложения в образовании дефицита. В условиях планового хозяйства предложение не имеет однозначного «порядка функционирования» — производитель стремится и не стремится выполнить натуральные плановые задания, стремится и не стремится удовлетворить платежеспособный спрос. Эта вытекающая из системы функционирования экономики (механизма) структурная (институциональная) негибкость предложения характерна как для состава, так и для объема предложения. Негибкость предложения является важным фактором, объясняющим явления дефицита.

Наряду с этим в статье, естественно, рассматривается и роль спроса в образовании дефицита.

THE ROLE OF PRICES AND SUPPLY IN SHORTAGE*

A. SIMON

The author analyzes the supply of a firm producing one commodity for a market characterized by non-perfect competition. The model intends to reflect features of the Hungarian economy. The firm is assumed to maximize profits and face demand that has a price elasticity less than infinite. The analysis concludes that if prices are administratively fixed, the firm will feel profitable to produce shortages even if it has unused production capacities.

The idea allows a reformulation of the notion of disequilibrium in some of the planned economies and makes a rethinking of its macroeconomic implications necessary.

Shortage is an omnipresent phenomenon in Hungarian economic life. Shortage phenomena are so deeply rooted in all economic fields that their explanation requires a comprehensive analysis of the functioning of the economy. The present article has no intention of providing such a comprehensive analysis; it will only deal with a partial field of shortage phenomena: the market of commodities and services. Even within this field, shortage will be analysed only in relation to demand, supply, and prices, while the deeper-lying, determinant causes will not be treated.

In his basic work [10] János Kornai provided a thorough and comprehensive analysis of all the shortage phenomena in a socialist economy. The present study largely relies on his statements and conceptual framework, though in its train of thought and system of conditions it departs from Kornai's theory in several points.

According to Kornai's basic idea, the Hungarian economy is a so-called resource-constrained economy. It is characteristic for such an economy that demand unlimited, or not sufficiently limited by financial (budget) constraints, siphons off from the producer enterprise all the reserves—the so-called mobilizable slack—necessary for a flexible adjustment to demand. The enterprise is driven by this never-satisfied demand towards a full utilization of capacities—capacity understood as the possibilities constrained by shortages acting on the input side. Therefore, according to Kornai, shortage is basically explained by insatiable demand: "... shortage depends not on the supply side but on the demand side." ([10] p. 349)

In this article, the factors determining a producer's supply will be examined, using the model of an enterprise turning out a single product. Logically analysing the behaviour of the firm, I shall arrive at the statement that, if certain conditions are fulfilled, the

*The author owes thanks to János Kornai for his comments on a former version of the present article. The author alone is, of course, responsible for the contents.

supply of the firm is not necessarily determined by constraints on the input side. It may be in the interest of the producer to supply goods in an incomplete selection, to schedule its deliveries in a manner unfavourable for the buyer, etc., that is, in producing all the phenomena summed up under the term "shortage", even if it has, otherwise, reserve capacities.

On the basis of Hungarian experience in recent years, I think that the importance of this idea has grown, and so has the sphere of validity of the underlying assumptions.

From 1979 on, Hungarian economic policy has been successful in restraining both investment and consumer demand. Although import restrictions have presumably also reduced capacities, it may be generally true that the relationship between demand and capacities has changed. Undoubtedly, this has widely mitigated shortages; in the building industry the number of refused orders have decreased, and perhaps even the so-called "standard of supply" of domestic retail trade has somewhat improved. (Though the latter may also reflect central economic policy influencing supply.) Nothing has, however, changed in what is the fundamental and all-embracing indicator of shortages in the economy, that is, in the structure of inventories: the ratio of total stock to production has not diminished and there is no indication that its distribution would shift towards output stocks. Because of uncertainties of supply, enterprises are still compelled to hoard input stocks, while they still do not want or are unable to build supply reserves in the form of output stocks. I think that the present study may be a useful contribution to explaining this phenomenon.

Hidden price increases and shortage

The classical example of hidden price increases *occurs during the introduction of new models of differentiated products*: stopping the sales of its former products, the producer turns a new item on the market more or less different from the earlier one. As the two goods are not simultaneously available, their relative prices may differ from their marginal rate of substitution. This allows a price increase without being statistically measurable. This form of price increase may occur independently whether prices are centrally controlled or not. In the latter case, only the consumers are to be misled, in the former the price authority as well.

There exists a form of hidden price increase which is not mentioned under this name in the economic literature, yet some of its features put it into this category. It is the *lowering of the standard of supply*. In the terminology of the Hungarian economic policymakers special terms have evolved indicating the conditions under which consumers can obtain the products needed. These conditions are called "supply situation". This "supply situation" is characterized by a "standard of supply" which is a measure of how easy or difficult it is to procure goods on the market. The term is synonymous to the "level of shortage".

Each product has two sorts of attributes, each of them important for the customer. Firstly, it has a group of properties that makes it suitable for the given purpose it is

bought for. Secondly, it is also important, how it can be acquired: how much trouble it costs to obtain it. If it is delivered on order, what are the terms of delivery, are they complied with, is it the same product delivered that has been ordered, etc.? The customer is ready to spend money for both of these attributes of the good. It depends on the nature of the product, how much higher price the buyer is willing to bear—if he has a choice—for a better “standard of supply”.

If somebody wants his bathroom to be tiled, he will ponder whether to buy the tiles from the TŰZÉP (Heating and Building Materials Trading Co.) where, say, 100 designs are sold, but only 6 to 8 of them are available at a time, or to buy from the private trader selling the same 100 designs at a 20 percent higher price, but offering 80 designs at a time. The buyer reflects how much trouble it would cost him to obtain the design of his taste from the TŰZÉP and, upon this consideration, it is by no means certain that he will choose the cheaper source of supply. For some buyers, it will be worth paying 20 percent more for the product that is easier to get, and they will turn to the private trader.

The terms of delivery are of great importance for materials, parts, and semi-finished products purchased for production, in which case delayed delivery causes bottlenecks, thus putting at risk rather high values of production. In such a case, if he can choose between a cheap source and safe supply, the customer will ponder whether erratic supply can be smoothed by keeping sufficient input stocks, or how much stockpiling would cost him. The lower the probability that the materials or parts in question will be needed in the production process, the higher are the costs of keeping input stocks.

The need for certain materials and parts is so unpredictable that it is practically impossible to counterbalance unsafe procurement by keeping input stocks. And where it is possible, the costs involved may be several times the value of the products purchased.

Formulating it paradoxically, the same product is not always the same for the consumer. Two materially identical products may be largely different from the economic aspect, depending on their availability. The product supplied irregularly or in a poor selection is *less valuable*. In statistics, this difference cannot be directly measured.

It is easy to see that a hidden price increase implied by the deterioration in the “standard of supply” and an increase in the intensity of shortage by the definition used by Kornai [9], [10] are the same. I interpret the same phenomenon in a different way, not because I do not agree with the general terminology, but in order to point out the relatedness of shortage and price. This will be needed later on in our explications.

An alternative formulation of the problem

It is a well-known fact that in the Hungarian economy the bulk of stocks is kept by users, in the form of input materials and parts. On the aggregate, this results in larger stocks than if the same materials were mostly stored by producers in the form of output stocks.* The producer has to store less of the goods, as the random claims of the

*The question is discussed in detail in [6] [7] and others.

individual buyers add up to a demand distributed more smoothly in time. Through a rearrangement of stocks buyers could save much more than sellers had to pay for keeping the stocks.

A similar asymmetry of costs asserts itself with the products where the buyer cannot insure himself against insecure supply by hoarding materials. In such a case, the buyer is compelled to costly substitutions, or to suffer production lags. Why is it that the seller and buyer do not agree upon a higher purchase price for a smooth and safe supply? A higher price would eliminate shortage by forcing some of the buyers to withdraw, and provide the basis of a smooth and safe supply. A higher price would directly bring higher profit for the seller, and safe supply would be of higher value for the buyer than the increment of price. What is it that prevents both parties from arriving at a mutually more favourable agreement?

Part of the explanation arises from the relationship between the state and enterprises. Kornai explained the essential features and consequences of this relationship ([10] Chapters 13 and 22). In his explanation, the higher profit produced by a higher price is not attractive to the seller, since it may be qualified as "too much" and taxed away at any time. Thus the shortage situation may be more convenient to him. At the same time, the buyer is not impeded in his buying intention by a higher price, because the state takes upon itself the burdens of the price increase—making use exactly of the profit taxed away from the seller.

These arguments contain, however, only a partial truth. The profit maximization efforts of the firm are mitigated by the profit equalization efforts of the state, and the elasticity of demand is reduced by the buyer's soft budget constraint. Yet it cannot be asserted that the motives of the firm do not include profit maximization at all, or that the buyer's budget constraint is infinitely soft in the sense that demand is independent of price. In the model to be presented here it will be demonstrated that, if indifference towards profit and softness of the budget constraint are not absolute, administrative price control prevents the buyer and seller from reaching an agreement on a higher price yielding mutually higher profits.

Assumptions of the model

The model is built upon three assumptions:

1. The enterprise aspires to increase its profit. This is not its single aim. Its decision-making is of course influenced by several other factors, often contrary to its profit motive. The motives of its decision-making are too complex to be described by just one assumption.* All this, however, does not prevent us from considering the profit motivation as an important trait in the activities of the firm.

*A detailed description of the mechanism and non-profit motives of enterprise decision-making is to be found in [8], Chapters 7–8.

2. Demand for the products of the firm is a decreasing function of price. This has two implications:

— First, that the buyers' (enterprises') budget constraint is not "infinitely" soft. That is to say, the buyer's demand is not independent of price. This means that theoretically any shortage could be eliminated by a price rise. The elasticity of demand depends on the softness of the budget constraint. In the case of a soft budget constraint, the buyer can pass some of the price increase onto its customers. However, as long as the budget constraint is not "entirely" soft, this passing over can only be incomplete. Therefore, a sufficiently large price increase will always succeed in clearing the market. The softer the budget constraint, the wider the spill-over effect of each price increase will be, thus the greater the inflationary effect that any exogenous price rise will exert.

— Second, that the enterprise is not in a situation of perfect competition. In perfect competition the firm faces a horizontal demand curve, that is, at a given price it can sell any quantity, while at a higher price none. In most cases the quantity that a firm can sell depends on the price. The more expensive the product, the less can be sold.

3. Prices are administratively controlled. This assumption means that the firm cannot make decisions on prices independently of the price authorities. The forms of price control are various, they range from fixing the price for each product to prescribing calculation schemes and profit margins. For our conclusions, it is indifferent, whether the principles of "competitive" pricing, or those of "cost-plus pricing" are used in the prescribed calculation scheme. The main point is that the enterprise cannot automatically shift its increased production costs onto its buyers, and is even less able to work out its prices by relying on its profit maximizing efforts: a price increase can be put through only by agreeing and bargaining with the authorities. Open price increases being tied to official permit, various forms of hidden price increase are of special importance.

The practical validity of the conclusions to be drawn from the preceding assumptions or the extent to which they may contribute to an explanation of the shortage phenomena depend, of course, basically on whether these assumptions reflect essential features of the economy. From this point of view, all three assumptions may be subject to discussion or further consideration. They can be given different weight according to which country's economy is being examined. The lower the profit incentive and the softer the budget constraint in an economy, the less our message holds. The assumptions do not hold in every field and in every situation even for the Hungarian economy of today. Nevertheless, they are characteristic widely enough to contribute significantly to an explanation of the shortage phenomena.

Demand surface

For the consumer there is always a tradeoff between the level of shortage and the price. He is ready to pay some price for the easy availability of the good, or to search longer or queue up if he hopes to get a bargain price. That means, that instead of a

demand curve we can draw a demand surface describing the relationship among price (p), shortages (s) and the quantity (q) of the good demanded. Demand is a monotonic function of both shortages and price: If shortages are too high, i.e. the procurement of a given good is too difficult, the consumer stops searching and substitutes. High prices affect his behavior in the same way. Because of the monotonicity of the demand function, the indifference curves between shortage and price do not cross each other. Other characteristics of the function (concavity or convexity) are uninteresting for our analysis.

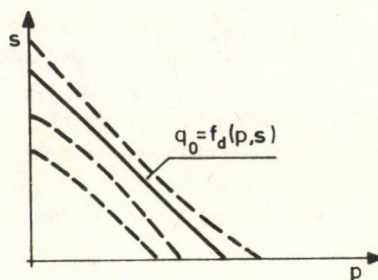


Fig. 1.

Relation between shortage and price

In *Figure 1*, prices (p) are measured on the horizontal axis, and the shortage indicator (s) on the vertical axis. The function $g_0 = f_d(p, s)$ is to represent the interdependency between price and shortage if the quantity q_0 is sold.

How can shortages be measured by a single indicator? Shortage phenomena are manifest in various forms: search, queuing, production loss, missing input, etc. One by one, these phenomena can more or less be measured statistically and the indicators can be ranked according to the intensity of shortage (if more search is needed to get a product, shortage is more intensive). The question is, whether the vectors composed of these indicators can be ranked. (For example, if there is less search but more queuing associated with a certain product, how can it be decided, whether the intensity of shortage has increased or decreased?) Of course, ranking is a matter of definition. Any monotonous function of the shortage vector can be defined as a shortage indicator*, but not any definition may be a fruitful one. The elements of the shortage vector, however, have something in common that makes it possible to add them up and create one indicator of shortage that can be used for our analysis. The common unit of measurement is the price that the consumer (buyer) is or would be willing to pay for having an easier access to the good. This unit of measurement results in the tangential of the indifference curve to be equal to -1 . (At least for a given quantity (q_0). For other quantities the price-shortage tradeoff may be different.)

*Such shortage indicator is defined and computed by Kornai for aggregates of products [11] pp. 12–19.

We don't deal with the problem of how to measure the level of shortage empirically. For some goods there are two different markets: an "official" and a "free" market. For these goods the level of shortage can be measured empirically. For example on the car market the consumer has a choice to sign up for a car and wait for his turn 5 years long, or to buy the car on the second-hand market with instant delivery at a higher price. A similar choice may be available for the consumer in our former example of tiles. For most commodities, however, such a choice does not exist and the expression of shortages in terms of prices would be much more difficult.

The correspondence between shortage phenomena and price makes it clear, why shortage phenomena can be defined as hidden price increases. Kornai describes purchase as a process ([10] pp. 65–81). Two kinds of events run parallel in the course of this process. One series of events is the repeated frustration of buying intentions as a consequence of encountering shortage phenomena; the other one is the repeated modification of buying intentions as information is continuously obtained on the shortage situation. Depending on which side of the process is being examined, different interpretations can be given to the functional relationship among the quantity sold, shortage, and price.

If price is considered to be constant in the function, while the intensity of shortage is changed, our reasoning according to the first interpretation is as follows: relying on his former experience of price and shortage, the buyer enters the market with a definite size of demand. The more intensive the shortage he encounters, the more often he has to end up with forced substitution. Thus the quantity sold decreases.

In the second interpretation, buyers consider

- the probability of obtaining the product
- losses they may suffer if purchase fails, or if it is not realized at the required time;

- how much input and trouble the purchase costs;
- how much uncertainty and effort the queuing up requires

and, these probable losses and inputs assessed, they add them to the purchase price and decide about their buying intentions. The more these factors weigh in the buyers' value judgement, the fewer products they wish to buy in the case of shortage. In this latter approach, the equivalence of a price increase and an increase in shortage is apparent and the definition of an increase in shortage as a hidden price increase becomes plausible. In this case the function $q = f_d(p, s)$ may be considered as a more general form of the demand function, in which price as an independent variable is present in two forms: hidden (s) and open (p). Later on, this function will be referred to as a demand function.

Before carrying on the analysis of the one-commodity model, a few comments should be made on how the introduction of several commodities would complicate the picture.

The relationship between shortage and price is a partial one, it is based on the assumption that prices as well as shortage are unchanged on the market of other products. In reality shortage phenomena on the market of certain products are dependent on those

on other markets just as much as they are dependent on the prices of all the other products. This fact does not affect our partial analysis, while it can raise difficulties when aggregating shortage indicators. These difficulties will not be discussed here, knowing that the problem is analogous to that of aggregating prices. Therefore, when later on the concept of shortage will be applied to product aggregates, this will only be justified inasmuch as the definition of average price indices is justified.

Cost function and shortage

Let us extend *Figure 1* by measuring on the horizontal axis not only the price of the product, but also its production costs (c). For the sake of simplicity, we assume that a given product of a given firm is involved, and that the enterprise produces this single product. The cost function of the firm assigns the minimum production costs to the various output quantities. This one-variable function is now expanded so as to include, beside the quantity of product, one of its quality indicators: the level of shortage on the market of the product. The function is formulated as $c = f_c(q, s)$, where c is the minimum cost per unit of output, q the quantity of output sold, and s the shortage indicator known from the demand function.

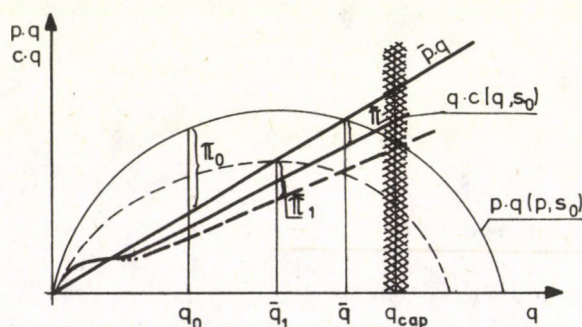


Fig. 2.

Relation between unit costs and prices versus shortages

Analogously to the tradeoff in the demand function between the availability of the good and its price let us see the tradeoff between the availability of the good and the production costs. The producer has to produce not only the good itself, but all those conditions that make the good available. These latter incur costs as well: costs of keeping reserves for an instant reaction on changes in demand. These reserves are in the form of either inventories or unused capacities. Kornai (1980) calls them productive slack. The better the availability of the good, i.e. the less shortage phenomena show up on the market, the more has to be spent on these reserves. The relationship is depicted in *Figure 2*.

Beyond a certain level of shortages the curve is vertical. In this range output capacities are less than demand. Shortage shows up in the sense of the disequilibrium models. Good example for goods like this are automobiles, where we have a long queue with deliveries of up to 5–8 years. In such a market it makes no sense for a producer to spend on car-showrooms, to build a dealer network or keep inventories of cars. In addition to the production costs of the car itself there are only some costs of administrating the list of customers signed up for buying a car, but these costs are independent of the level of shortage, i.e. the length of the queue. If the limits of output is not so strictly determined by capacities, there is a tradeoff between shortage phenomena and costs. Better availability, i.e. more reliable delivery dates, better selection of goods, better territorial spread of supply etc. all mean more costs. Over a certain level the customer does not feel an improvement in the availability of the good, however more is spent on it. He becomes indifferent whether he has a choice of three-hundred sorts of cheese in the nearest store or a thousand or he does not care to have a grocery store on every corner or only every second corner. What is the level of availability of goods that will develop in the ideal market economy? It is the point where the slope of the demand curve equals the cost curve (s_0). Here are profits at the maximum level. It is a trivial result, that's why economic theory of the market economies does not pay any attention to this aspect of the market. What happens, however, if the price of the good is administratively fixed and set to \bar{p} ?

Profits and shortages

If we have the same amount of output to sell (q_0), the level of shortage will be evidently higher (\bar{s}). Let us extend our model to have output as a variable to see whether even in this case the limit on price leads to an increase in shortage.

Figure 3 shows the total cost and revenue curves of the firm in nonperfect competition. Curve $p.q$ (p, s_0) indicates it's revenue at the given "equilibrium" level of

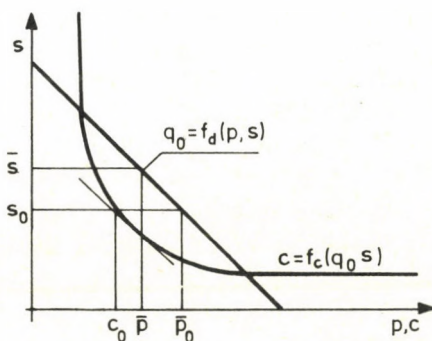


Fig. 3.

Total revenue and costs as a function of output

shortage. Its cost curve in this case is $q \cdot c(q, s_0)$, and it reaches maximum profit at q_0 , provided that the firm can decide on the price of its good itself and its capacity does not limit its sales. Both assumptions are considered natural in a market economy. In a planned economy, however, it is better to handle both prices and capacity as parameters and look for the consequences of changing them.

Let us first assume, that capacities (q_{cap}) do not constrain output, and prices are set administratively to \bar{p} . In this case with the same level of shortages, the firm can sell \bar{q} output and realize π^* profits. The question is, whether firms would cut costs by increasing shortages putting up with less sales volume, or boost sales by cutting shortages. At constant prices (\bar{p}) and shortages (s_0) profits

$$\bar{\pi} = \bar{p} \cdot \bar{q}(\bar{p}, s_0) - c(\bar{q}, s_0) \cdot \bar{q}(\bar{p}, s_0)$$

The question is, whether $d\pi/ds$ is less or greater than 0. For sake of simplicity assume $\delta c/\delta q = 0$. Then

$$d\pi/ds = \bar{p} \cdot (\partial q/\partial s) - (q \cdot \delta c/\delta s + c \cdot \partial q/\partial s) = q \cdot ((\bar{p} - c/\bar{p}) \cdot (\bar{q}/q) \cdot (\partial q/\partial s - \partial c/\partial s)).$$

We know, that at the point (p_0, q_0, s_0) $d\pi/ds = 0$. At the point (\bar{p}, \bar{q}, s_0) this has to be positive the following arguments:

A $\bar{p} < p_0$, therefore $\bar{q} > q_0$. As $(-p/q) \cdot (\partial q/\partial s)$ may be interpreted as an elasticity of demand, it decreases as a function of output in absolute terms, and increases in value terms. Assuming $\delta c/\delta s$ to be independent of q and $\bar{p} - c > 0$, this means that in the point (\bar{p}, \bar{q}, s_0) $d\pi/ds$ is greater than in point (p_0, q_0, s_0) .

This means that the firm will decide to increase shortages. It will attain higher profits (π_1) by setting output lower ($q_1 < \bar{q}$).

The explanation of this behavior is very simple. The firm produces both the good and the conditions to purchase this good. The price control can be implemented to the price of the good, but it cannot be extended to these conditions. The firm, which operates in an environment where he is a price setter, increases price in a hidden way, by deteriorating the conditions of the availability of the good. This approach is related to *Murphy's* [12] analysis of the impact of price controls on the output and efficiency of the competitive firm when quality is a variable.

The relation between fixed prices and shortages enables us to formulate exactly the idea suggested in the introduction. Without price fixing, profit will be maximum at $\partial c/\partial s = dp/ds$. Since price fixing increases shortage and $\partial c/\partial s$ is a diminishing function of shortage, with the price fixed $\partial c/\partial s < dp/ds$ holds at the maximum profit point. This means that price control induces the enterprise to produce a shortage that brings smaller saving for the enterprise than the loss to the buyers.

Capacity and shortages

In our arguments we assumed that capacity does not limit output. In the example of tiles, it was assumed that the factory would be able to change its production program for producing different designs more frequently, keep larger inventories and sell more tiles in a better selection, but it has no interest to do that. What happens, however, if $q_{\text{cap}} < q_1$? Explaining the primary causes of shortage, it is indifferent for the argument, whether capacity is low because of indirect effects of shortages in other goods used by our firm as intermediate inputs, or because demand blows up the revenue curve of the firm, or both. In the case of $q_{\text{cap}} < q_1$ the reason of unsatisfactory supply is simply the fact that the factory is unable to meet demand. It works as Kornai [10] described it. The level of output does not respond to price and it is constrained only by capacity. In contrast to Kornai's view, however, shortage is still a consequence of price control. If the price elasticity of demand is different from zero, there is always a (high) price that eliminates shortage. Lack of response only means that within the given price interval, the derivative of output (supply) to price will be zero.

One of the main conclusions of our model is not new: it formulates the identity between shortage and suppressed price rise if the assumptions (profit maximization, positive price elasticity) of the model hold true. The other conclusion is new: it has been demonstrated that, under certain conditions, shortages are not necessarily concomitant with production being increased up to the physical limits of capacity.

If we accept the rest of the assumptions of the model to hold true, the relevance of this conclusion remains an empirical question, i.e. it depends on whether $q_{\text{cap}} \geq q_1$. Presumably, it would be very difficult to decide the question on the basis of microeconomic data and information, as in the present Hungarian system firms have strong interests against revealing their reserve capacities. Certainly, the situation is different across countries, sectors and enterprises, and it even changes in time. It seems to be most probable, that actual shortages can be explained only as a combined effect of the behavior of the firm, capacity bottlenecks and the inflexibilities in the economy having been not discussed here. The weights of these factors may be different from country to country. The extreme case may be an economy with overall capacity constraints. This may be the case, when the market is disrupted and the goods are allocated by rationing. The less the ratio of demand to capacity, the more is depending on the behavior of the firms.

For Hungary, macroeconomic data support the assumption, that demand is kept lower than output capacity. Observations clearly show that industrial production reacts rather sensitively on demand. Where could the additional industrial output at times of investment peaks come from, if not from mobilizing the reserves existing in periods of recession? I think that our model may provide sufficient microeconomic grounds to explain the macroeconomic phenomenon that the volume of output changes in

accordance with the volume of aggregate demand, while shortage phenomena are present in every phase of the business cycle.*

Presumably, excess capacities are not characteristic of every socialist economy. In Hungary, after drastic cutbacks in demand after 1979, the \bar{p}/p_0 ratio has been improving in an increasing number of markets. Thereby also the value of \bar{q} has diminished in comparison with q_{cap} . There are very few areas, however, where price control is redundant, and shortage is s_0 .

Aggregate excess demand without forced saving

Aggregate excess demand has been a longstanding topic of economic theory. What happens if households have more money to spend than the total value of products supplied? In the ideal market economy the answer is easy: an aggregate excess demand cannot come into existence, for the price level rises to clear the market. If prices are inelastic, households will temporarily accumulate money, until shortages are eliminated. Unspent money is called forced saving. This is the line of thought that gives a "classical" answer to the question, what happens to aggregate excess demand. *Barro and Grossman* ([3], p. 74), trace back this answer to *Robertson* [13]. In this approach it is assumed that excess demand is temporary. Households postpone their purchases in the hope that they can get the goods more easily later. What happens, however, if prices are controlled on a long term, i.e., if the price level is prevented from rising by decree?

Before giving our answer on the question, let us shortly review the concepts and ideas evolved around the question.

How can aggregate excess demand be identified?

For a single good the notion of excess demand is simple. Assuming demand and supply functions to have the appropriate slopes, and fixing the price lower than the equilibrium level, we get excess demand as the difference between supply and demand.

Barro and Grossman [1], [2] used the same single good framework for the interpretation of aggregate excess demand. According to their definition, if the sum of the goods (aggregated at given prices) demanded is higher than the sum of goods supplied, we have an aggregate excess demand, and the difference between demand and supply is forced saving. The following argument will show, that this definition is too restrictive to apply to the situation of most of the planned economies. The definition implies "netting out" shortages and slacks. Aggregate excess demand exists only if net demand is positive. When does this occur? Let us assume that the consumer has failed to buy some goods because of short supply. He has two choices: he can decide to save the money not spent

*Our line of thought departs at this point from that of János Kornai, whose attention the phenomenon did not escape, either. In Kornai's economy, there is no reserve capacity (mobilizable slack). The increase of demand intensifies shortage, and growing shortage compels enterprises — through pressure put on enterprise managers — to work more intensively, i.e. to increase capacities. ([11] p. 30)

on the desired good or to substitute, i.e. to substitute either money or available goods for the missing goods. He will choose saving only if he considers shortage as transitory, if he hopes, that in the future he can easier find the goods he is looking for in vain now. Shortages, however, are considered normal in these economies, customers are accustomed to it, and they do not expect any changes in this respect. Thus he will substitute money only to the extent that he needs it for other (transaction) purposes. His demand for money may be higher if shortages increase, but it is by no means more than a small fraction of the value of the missing good. What he does therefore is to buy goods, which are abundant. He substitutes 1. either until he spends all his money he wanted to spend, 2. or until he finds that there is nothing left to spend the money on. In the former case there is no excess demand according to the Barro-Grossman concept. In the latter case, however, not only forced saving appears, but there is an excess demand for every commodity! This is the situation when the shops become empty, and the limits to spending are set by the consumers' time to line up for various goods. Although there exists historical experience on the latter case, the first case is the typical for the normally functioning planned economy.

Barro and Grossman had the latter case in mind when building their model. Goods were assumed to be allocated by rationing. This assumption is necessary for the "supply multiplier" to come about in their model. They assumed that employees withdraw from the labor market, if they do not find enough goods to spend their money on. They get less income, and finally demand adjusts to supply at a lower level of income. If consumption is not rationed, however, consumption of the "representative household" is constrained by its income and not by aggregate supply directly, even though this consumption involves much search and effort when shopping. For this more general case of shortages without forced saving the Barro-Grossman theory has no relevance.

Soós [14] asserts, that shortages are not a result of the high level of demand, but rather of the structure of supply. The planning system is not flexible enough to adjust supply instantly to the changing structure of demand. He surely points out an important factor of the problem, but the shortcoming of his explanation is, that it does not reflect the repressed inflation feature of the economy.

Kornai realized, that the aggregate notion of demand and supply does not help to explain shortages. He refuses therefore to use the term aggregate excess demand and approaches the problem differently.

To summarize very briefly his theory, he considers the CPEs as nonmonetarized economies. There are no supply and demand curves here. Demand is infinite in a sense that whenever production capacities are available, demand will be created—money will be given any time to use them—whatever the prices. Output is therefore at a capacity level and the shortage phenomena arise because of this full capacity utilization. Producers do not have those reserves in resources—called productive slack—that would allow them a flexible response to demand.

Departure of this paper from his approach has been pointed out earlier. The question may arise, whether aggregate excess demand can be given a meaningful interpretation by our analysis.

Barro and Grossman defined and used the terms aggregate excess demand and repressed inflation as equivalents. In the auction-type market underlying their analysis the equivalence holds. In our model, which shows more analogies to the search models, repressed inflation is present by definition, but the forced saving feature of aggregate excess demand is missing. Thus we can use the two terms interchangeably only if we define an excess demand situation as a case where the level of aggregate demand in a market of controlled prices is as high that it would produce a higher price level in the non-controlled case. Ultimately, the usage of the term is a matter of semantics.

Some concluding remarks

On the basis of our model, there seem to be two possible ways to eliminate shortages: either demand is reduced to a level where price limits are not effective any more, or the control on prices is abolished and prices are allowed to rise. Whichever policy is chosen, the deflationary or the inflationary one, the main idea behind is to reduce the ratio between demand and capacity. The result is obviously a setback in output, at least in the short run. This phenomenon is the same that Kornai calls the transition from suction to pressure ([8], pp. 324–325). In the long run, the elimination of shortages and the resulting disappearance of bottlenecks can increase capacities, that is to say, a lower degree of capacity utilization does not necessarily imply lower output.

The two policy options by themselves are by no means recipes to a solution of the problem of excess demand in any of the planned economies. The difficulty of the solution will be obvious, if we assume some plausible numerical values for certain parameters of the model in the present economic system. Let us assume that we take the option of price liberalization. Kornai [9] would say, that the accommodating behaviour of the state allows the firms to pass over any increase in prices. We have discarded this total pass-over hypothesis but do not deny the existence of the accommodating behaviour of the state in the present system. Let us assume that the firm can pass over, directly or through the budget, 75 percent of the price increases to its buyers. This is to say that the multiplier of each exogenous price increase is 4. If, for example, at the initial stage of the price liberalization enterprises considered a 10 percent increase as an optimum for their profit, price increases would feedback until they settled down at 40 percent. Such perspectives are too alarming to render a liberal price policy attractive.

The deflationary policy option is similarly unrealistic in the present system of economic management. The existing institutional system of the Hungarian economy seems to be unable to manage demand independently of costs (at least in the enterprise sphere).

Tamás *Bauer* may have been the first to formulate the idea ([4], [5]), and Kornai made it into the basis of his explanation of the shortage phenomenon, that the institutional conditions belong to the essence of our economic system and, therefore, it would be an illusion to believe that the elimination of shortage is simply a question of

economic policy decision. Agreeing with this standpoint, it is clear that the present study has dealt only with some aspects of the complicated mechanism that produces shortages: the interdependencies among prices, supply and shortage. Though these interdependencies do not explain the whole story about shortages, they seem to be an essential part of the explanation.

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РОЛЬ ЦЕН И ПРЕДЛОЖЕНИЯ В ДЕФИЦИТЕ

А. ШИМОН

Автор анализирует предложение такого предприятия, которое производит одно единственное изделие для рынка, конкуренция на котором несовершенна. Представленная модель стремится отразить особенности венгерской экономики. Предполагается, что предприятие стремится к максимализации своей прибыли, а эластичность спроса на его продукт в зависимости от цены не бесконечна. Согласно выводу из анализа, если цены устанавливаются в административном порядке, то предприятию выгодно создавать дефицит своей продукции даже тогда, когда оно располагает неиспользованными мощностями. В статье дается новая формулировка некоторых характерных для социалистической экономики явлений несбалансированности и ставится вопрос о необходимости пересмотра макроэкономических аспектов неравновесия.

ENTERPRISE BUSINESS PARTNERSHIPS (VGMK) IN HUNGARY—A CASE STUDY

G. RÉVÉSZ

In the year 1981, statutes were promulgated by the Government to stimulate small enterprising in Hungary. With these statutes the so-called business partnership form has been created, a scheme under which teams of not more than 30 persons may set up small productive or service enterprises while keeping their full-time jobs, i.e., actually as part-time occupation. It also became possible to form business partnerships in big enterprises: such "enterprise business partnerships" or VGMKs may, with the approval of the enterprise manager, undertake service or productive work, using (or eventually renting) enterprise equipment. These teams can only work after their legal worktime has been completed. The VGMK form* represents a considerable share in the small enterprises so far established. In the first half of 1984, slightly more than 100 000 people participated in Hungary in the work of about 10 000 VGMKs. The study published hereunder gives a factual and empirical presentation of the activities of VGMKs set up in one of the big companies.

This paper is a report on the 1983 activity of enterprise business partnership (VGMKs) set up in a department of a big enterprise (let it be named "Factory BX"**).

In *Part One* the development of the VGMK's weight and role, the VGMK earnings and the pertaining relations are studied from the aspect of workforce conditions in the factory. *Part Two* and *Part Three* are factual presentations of the precedents, causes and circumstances of the forming of VGMKs in two selected workshops examined in depth, furthermore, of their impacts on management and efficiency. The two selected workshops, to be called hereinafter Beta Works and Ro Works, are important for the output of the factory: the products of Beta Works contributing 35 percent of the factory's total price receipts and 40 percent of its price receipts from western exports with a high direct material input while the output of Ro Works, of extremely low direct material inputs, gave only 5 percent of total price receipts but 20 percent of western export price receipts. Moreover, about half of the total VGMK staff of the factory, about two thirds of the memberships of the productive VGMKs, work in the VGMKs of these

*There is still some uncertainty regarding the proper English rendering of VGMK. The name 'Business partnership' is somewhat misleading as some of the usual criteria of partnership are missing. In other papers the term "workteam" has been used.

**Except for some abridgements, this text is almost literally identical with the report submitted to the company in question. Alterations were made mainly in order to keep the company and the factory unidentified. Data have also been changed in this spirit but their interrelations and proportions have been preserved.

Table 1
Full-time staff of Factory BX since 1980

Year	Total staff		From the total				From the engaged	
	persons	percent	non-manual staff		manual staff		manual direct staff	
			persons	percent	persons	percent	persons	production'
								percent
1980	4366	—	1183	—	3183	—	1930	—
1981	4171	96	1110	94	3061	96	1446	96
1982	3847	92	1073	97	2774	91	1339	91
1983	3548	92	1051	98	2497	90	1179	88

*Preceding period = 100.

Table 2
Complementary labour resources expressed in terms of "composed labour"*

Year	Overtime		Commission work		Part-time staff		Total	
	persons	percent**	persons	percent**	persons	percent**	persons	percent**
1980	168	—	186	—	7	—	361	—
1981	160	95	184	99	11	157	355	98
1982	138	86	220	120	29	265	387	109
1983	104	75	111	50	8	28	223	58

*For convenience, the available data were expressed in terms of "composed labour". In the definition of composed labour the main reference was the amount of hours actually worked which was directly accessible in the company records: the given amounts of hours were divided by the annual mean number of hours worked by manual workers (eg. for 1982 by 1975 hrs/men for the whole factory) to obtain the data of "composed labour". The number of hours used as starting data was determined for the individual items on the basis of the amount of money paid out under the given title.

**Preceding period = 100.

two Works. *Part Four* is an outline of some conclusions concerning the said subjects and of opinions and ideas about the opportunities and future prospects.

The data base for this study was compiled partly from the company records and partly from the internal records of the two Works analysed. In the Works several interviews and a survey by questionnaire were made and finally also executives and leading experts being in contact with the work of VGMKs were consulted.

Impacts on labour resources and on the earnings of workers

The changes in labour resources

A fairly considerable decrease of staff has been characteristic of the labour conditions of the factory for several years. This process, otherwise typical of enterprises located in the town in question, was alleviated in Factory BX—like in other companies—by transactions circumventing the restrictions on overtime. Thus, because of labour shortage and in order to save wages, it became rather general that partial operations were given in commission to employees of other firms. On the other hand, enterprises obtained permission to employ their own workers part-time after the legal worktime and engage them in work different from that performed as full-time employees

In 1982 the forming of VGMKs started vigorously in the factory. The “break” shown in *Table 2* for the year 1983 was a consequence mainly of that. Namely, a considerable amount of activities earlier done in overtime, furthermore, chiefly in commission and part-time work, was undertaken by the VGMKs, that is, part of overtime and commissioned as well as part-time work was organized into VGMK work.

In 1982 the factory paid out a total of nearly 8 million forints to 19 VGMKs, comprising nearly 350 workers, for their work. In 1983 the VGMK activity further increased: during that year 39 VGMKs comprising a total of 760 men earned nearly 40 million forints of gross income.

The following data show the factory's VGMKs classified according to type (see *Table 3*):

VGMK work is naturally to be viewed together with other labour resources. Complementing the above, *Tables 4* and *5* present the composition and magnitude of available labour, as well as ratios showing changes, now for the total staff and for the “composed” labour—for the factory as a whole and for the two workshops examined.

It can be read from *Table 4* that the complementary resources, i.e., the “composed” labour, are growing in importance. On the level of the factory the complementary resources were already above 20 percent for those actually participating in production. The growing importance and spreading of VGMK work within the complementary resources is apparent.

The data of Beta Works show a peculiar structural pattern. Complementary labour resources amounted already in 1980–81 to about 1/3 and in actual production to 2/5, while in 1983 the share of the “composed” labour in actual production reached almost

Table 3
Factory VGMKs

	No.	Staff persons	Gross income million Fts	Yearly composed labour heads*	No.	Staff (persons)	Gross income million Fts	Yearly composed labour heads*
	in 1982				in 1983			
Total	19	349	7.85	54	39	760	39.19	273
from this:								
non-manual	1	11	0.14	1	2	44	1.06	7
manual, non-producing	4	55	0.62	4	11	122	8.99	63
manual producing	14	283	7.09	49	26	594	29.14	203
from this:								
Beta Works	4	80	1.76	13	7	192	16.06	112
Ro Works	8	135	3.11	22	9	185	8.47	59

*The "hour content" of VGMK work was determined from gross VGMK incomes on the basis of 80 Fts/hr usually considered in stating wages and the value of "composed labour" of VGMK work was derived from that in accordance with the explanation attached to *Table 2*. The higher efficiency of work done in VGMK than in full-time work was deliberately ignored. VGMK work is, namely, "worth" for the company the value of its output in terms of full-time work.

Table 4

		Full-time staff	Total Composed on the basis of overtime and part-time work	labour VGMK work	Full-time staff	From this: actually productive Composed on the basis of overtime and part-time work	labour VGMK work
Factory BX							
	1980	90	10	—	86	14	—
	1981	90	10	—	86	14	—
	1982	86	12	—	81	16	3
	1983	84	7	9	78	9	13
Beta Works							
	1980	65	35	—	60	40	—
	1981	67	33	—	61	39	—
	1982	63	33	4	56	39	5
	1983	59	9	32	52	9	39
Ro Works							
	1980	95	5	—	95	5	—
	1981	97	3	—	97	3	—
	1982	90	3	7	86	2	12
	1983	80	2	18	73	1	26

Table 5
The volumes of manual labour resources

	Total		Preceding year = 100			
	Factory BX		Beta Works		Ro Works	
	total	of this: actually productive	total	of this: actually productive	total	of this: actually productive
1981/80 total	96	96	98	96	96	95
of this: full-time	96	96	100	98	99	97
1982/81 total	94	97	96	96	106	118
of this: full-time	91	91	91	88	98	105
1983/82 total	94	95	100	108	106	119
of this: full-time	90	88	94	97	95	101
1983/80 total	85	86	94	100	108	133
of this: full-time	79	78	86	84	92	103

50 percent, most of it contributed by VGMK activity, taking over the lion's share of the role of overtime and commissioned work.

In the Ro Works (where work is continuous) the weight of complementary labour resources had been insignificant before the VGMKs were organized. The latter changed the situation also here (we shall see the content of this change later): complementary sources, i.e., VGMK-activity already exceeded 25 percent in 1983.

It is apparent from *Table 5* that the drawing in of complementary resources only alleviated but did not eliminate the manpower losses in the factory. As against 1980, in 1983 the number of manual full-time staff fell to 79 percent and within it that of people actually engaged in production to 78 percent—while the data also including the complementary resources are 85 percent, and 86 percent for actual production. Strikingly, this extension of the complementary resources (as is known mainly through VGMK work as from the 4th quarter of 1982) made up in the Beta Works for the lost full-time manpower, while in the Ro Works, in spite of a relatively slight decrease of manual full-time labour: the staff expanded by 8 percent and the number of those directly engaged in production by one third.

VGMK earnings

The size and importance of VGMK earnings are illustrated by *Table 6*.

The income earned from VGMK work has become quite appreciable in the factory. Its net amount, i.e., the amount translated into personal purchasing power, represented 14 percent of the total wage bill in 1983.* The net remunerations paid out to producing VGMKs amounted to one third of the total wages of those engaged in production.

The weight of payments for VGMK work cannot be overestimated from the point of view of VGMK members (see *Table 6*, columns 6 and 7). In 1983, this income of theirs reached, on the average, 2/3 of their wages: in the case of VGMK members not working in actual production and of VGMK members of the Beta Works, the net VGMK remuneration received equalled total wage earnings.

These data which relate to the averages, that is, to groups of VGMKs and not to a given person or VGMK, raise questions by themselves. How could incomes be formed in enterprise work done after the legal working hours? How does the enterprise treat this channel of remuneration which, considering the limited wage payment possibilities, provides relatively enormous opportunities?

Answers to these questions were hoped to be found through a close-up review of activities of VGMKs working in the Beta Works and the Ro Works.

*These amounts are not paid from the enterprise wage-fund; they can be charged to other costs.—Ed. note.

Table 6
Wages and net VGMK remunerations in 1983*

	Wage mil- lion Fts	Net VGMK fees	Per- cent 2/1	Full-time staff persons	VGMK labour persons	Per capita	
						wages thousand Fts 1/4	VGMK fees 2/5
Factory BX in total	223	31.4	14	3548	760	62.9	41.3
from this:							
non-manual	79	0.8	1	1051	44	75.2	19.3
manual, non-productive	76	7.3	10	1318	122	57.8	59.8
manual, productive	68	23.3	34	1179	594	57.6	39.2
manual, total	144	30.6	21	2497	716	57.7	42.7
of this:							
Beta Works	12.6	12.8	102	205	192	65.6	66.7
Ro Works	15.0	6.8	45	264	185	56.8	43.0

*Because of payments to the social insurance scheme and various levies, "net VGMK remunerations" are equal to 0.8 times the amounts paid out to VGMKs.

VGMK activity in Beta Works

The creation of teams

Each VGMK functioning in the Works was formed from existing weekend overtime teams in a manner that also part of the commissioned work, done by outworkers, was undertaken. Already *Table 4* showed that the complementary labour resources of Beta Works (nearly half of the actually producing workers) underwent a profound rearrangement between 1982 and 1983.

The four VGMKs, of which two were participating each in the production of products I and J, respectively, were formed from overtime teams set up in workshops of the Works operating in one shift on weekdays. In this workshop the previous overtime teams were organized for Saturday and Sunday shifts in a way that the regular workers of the workshop were completed with "guest workers" from other workshops of the factory: about 3 "guest workers" did (and still do) fall on one regular worker. The VGMKs manufacturing Product K, Product L and Product M, respectively, are operating in a section of the Works each, run in three shifts. The antecedents here were the weekend overtime teams formed from regular workers.

The current VGMK membership is almost completely identical with that of the earlier overtime teams. Also their working schedule is the same. As people put it: on weekends they work 48 hrs, that is, they work 12 hours both on Saturdays and Sundays with fortnightly alternations ($2 \times 2 \times 12 = 48$ hrs/month). This was modified in some VGMKs or in some periods to a 12+8 hr or 8+8 hr working schedule.

Some overtime teams transformed themselves into VGMKs already in late Summer 1982 while others only in early 1983, fighting the difficulties of the red-tape labyrinth. Their formation had been preceded by scrupulous computations: to see if the money earlier earned through weekend overtime work could be made and if it would be worth while, considering that VGMK earnings are not considered in the pension fund or sick-pay. (No wonder that in this matter the opinion of "old" workers was different from that of the young.) Hesitating people were finally persuaded by the encouragement given by the management of the Works and especially by the example of the pioneers (in the given workshop, especially by the team turning out product K). They realized that careful and intensive work and proper self-organization could considerably increase their incomes. Furthermore, some departments of the factory management as well as the trade union organizations had often made objections to overtime work.

VGMK internal relations and earnings

The agreement of VGMKs with the management is very sensible under the given conditions. For a unit of product of perfect quality turned out by the VGMK, the factory pays an amount calculated on the basis of the normed time input that corresponds to Ft 80/hour, provided that the quantity normed for legal working hours has been duly delivered.

People say: "this is not paid by the hour any more—any spoiled batch is spoiled for ourselves". In VGMK activity also foremen and shift leaders perform manual work: with an intelligent and flexible division of labour everybody keeps working all the time and the members do not tolerate any indolent, tenant person among themselves. Locksmiths are also involved in the VGMKs in order to repair promptly any small breakdown as "idling is our loss" and when such job is not required the locksmiths, too, attend to part of the normal working process.

People say that as against their monthly earnings of 3–4 thousand forints a month in the overtime teamwork (earnings of 700–1000 forints for earlier overtime work during weekends are recalled) they receive about 4–5 thousand forints for VGMK activity. They emphasize that, beside stepped-up labour intensity, work is also much better organized. According to their statements the productivity of VGMK work is by about 20 to 30 percent higher than that of full-time work (and of the old overtime work), owing to higher intensity, nonstop working and careful preparation for the work in the weekend (which also implies mutual good cooperation with "sister" VGMKs which pursue their activities in the same field).

People tend to underestimate their VGMK earnings in terms of figures but it will be seen later that not as badly as it first seems. (See *Table 7*.) The amount of gross remuneration is not accurately the same as data recorded in book-keeping: the presumable reason is a time lag in book-keeping.

Let us consider the highest gross remuneration of 8.800 Ft/person a month, or, its yearly amount of 105 thousand forints of gross earnings. From this, yearly 3000 Ft of social insurance contribution as well as 3 percent membership charges amounting to 3150

Table 7
*Remuneration received by the VGMK members in Beta Works
on the basis of performance in the year 1983*

VGMK name	Product name	VGMK output (in physical unit of mea- surement)	Remunera- tion Ft/unit	Remunera- tion total (thousand) Ft	No. of VGMK members (persons)	Per capita remuneration Fts
Beta 1 Beta 2	Product I	2637	2400	6329	60	8790
Beta 3 Beta 4	Product J	1243	3300	4101	45	7594
Beta 5	Product K	233	7500	1746	29	5017
Beta 6	Product L	294	6750	1986	30	5517
Beta 7	Product M	494	5000	2470	28	7351
total, ie., average				16632	192	7219

Ft were deducted, so the remaining amount was 99 thousand Forints. On this amount, 15.600 Ft of income tax and another 1560 Ft of urban development contribution were levied. It follows that from the 105 thousand forints of gross per capita earning round 82 thousand forints could be paid to the VGMK member which is equivalent to 6.800 forints of monthly income instead of the initial amount of 8.800 forints.

In the last months of the year the VGMK member is naturally charged according to a higher tax rate as it follows from the logic of progressive income taxation and, consequently, his net earnings amount in those months not to 6.800 monthly but to less than that (in our case 6.000 forints).

Some further remarks must be made here in the context of VGMK earnings.

The distribution of remunerations among VGMK members is usually proportionate, the exception being the special remuneration paid for the administrative and organizing

brainwork of VGMK representatives. (Otherwise the VGMK representatives take part in manual work like common VGM members.) It was raised on some occasions that differentiation should be made considering professional knowledge, etc., however, such attempts were repeatedly thwarted.

The persons concerned are of the opinion that the activity of "Beta 5" VGMK was limited by difficulties in the marketing of Product K, and this was the reason why their per capita receipts fell below the earnings of the other four VGMKs. The reason given in "Beta 6" for the same phenomenon (also by skilled workers disinterested in the production of Product L) was that it is extremely hard to attain additional performance (higher productivity) over normatives specified on the basis of old, tested and perfectly elaborated technologies.

In addition to the said and certainly not unfounded reasons the relatively slower performances and receipts of these two VGMKs were probably also attributable to the regulation of the output by those experienced skilled workers and foremen who could think in terms of future opportunities and who discharged managerial functions in the VGMK.

*The activity of the VGMK and the enterprise:
the benefit of the enterprise*

The advantages of VGMK activity from the enterprise point of view are manifold. Let us first regard the simple wage aspect which is often quoted by persons disapproving of the activities of enterprise business partnerships—not without reason yet with a narrow-sighted bias.

Resorting to VGMK work makes it possible to raise wages or, more precisely, incomes for groups of workers involved in VGMK work by circumventing the regulations of earnings. Furthermore, *via* the replacement of overtime, wage raising opportunity is provided to the enterprise automatically and, as it is usually stressed, without any special performance.

The VGMK organized in Beta Works indeed assures considerable secondary earnings (of an average net amount about equivalent to the wage earned in the course of full-time work) for 105 people from the 233 full-time employees of the works (and in this figure mainly from the 205 manual workers) as well as for another 87 'guest workers' from Factory BX. A few paragraphs later the additional output will be compared to this additional income.

Of course, it is also true that the discontinuing of overtime provides an opportunity to increase full-time earnings. The number of overtime hours in Beta Works was 76,000 in 1982 and 26,000 in 1983.

Considering that overtime hours are wholly weekend hours and assuming an average of 60 Ft/hr for the overtime hours, the replacement of overtime relieved the wage bill from a liability of (76,000–26,000). 60=3 million forints. Furthermore, counting 30 Ft

as an average hourly full-time wage the replacement of overtime allows of (76.000–26.000):(60x30)=1.5 million forints for raising average wages.

This amount is sufficient for raising the wages of full-time manual workers (1.179 men) regularly employed by a monthly 100 forints. Of course other uses could also be quoted. It may be assumed that one third of the 1051-strong non-manual staff can be regarded to be really key people in the enterprise. Projected to this group, the automatic savings on average wage deriving from the existence of the VGMKs functioning in Beta Works provide the funds for a really substantial raising of monthly wages by 350 forints on average.

At any rate, let us state it in round figures that in the VGMKs of Beta Works the net income of workers was 13 million forints in 1983, the wage savings reached 3 million forints of which 1.5 million forints were available for the enterprise as wages. That is, VGMK work in itself resulted in an outflow of surplus purchasing power amounting to about 10 million forints on the level of Beta Works and to 11.5 million forints on the enterprise level.

What is the equivalent on the other pole, how much additional output can be attributed to the activity of the VGMKs functioning in Beta Works? Additional output was measured for five main products of Beta Works with the aid of per unit normative (standard) hours. The time trend of the volume of output per unit of normative hours determined, is assumed to be valid for the whole of Beta Works since the ratio of hours used for the five main products according to the norms hardly changed relative to the total volume of hours used in production in the different periods (being about three fourths of that in every year). Trying to answer the above question we are going to study the role the different elements of labour resources can play in the changing volume thus obtained.

Table 8 illustrating the change in the volume of output was computed from the production data for the 5 main products of Beta Works and from the per unit normative hour specifications.

Computed for the 5 main products the volume of output decreased by 3 percent in 1982 over 1981 and increased by 19 percent in 1983.

Let us put together the information we have. In 1982 as against 1981, Beta Works suffered an especially sensitive loss of labour (see *Table 5*): the number of manual full-time employees decreased by 9 percent and within it that of actually productive workers by 12 percent. This loss of labour was somewhat alleviated by the expansion of complementary resources (mainly overtime and commissioned work). Finally, from 1981 to 1982 the total labour resources diminished by 4 percent and production by 3 percent. By 1983, the decrease of full-time employees continued, although at a slower rate. In that year, however, the creation of VGMKs assured a much more massive mobilization of complementary resources. As it is shown in *Table 8*, nearly half of the output (exactly 46 percent) was turned out by the VGMKs. The labour resource gained through the employment of the VGMK form proved to be potentially more than the loss suffered in full-time labour: with labour resources that can safely be regarded as

Table 8
Volumes of 5 main products expressed in normative hours

								1000 hours
		Product I	Product J	Product K	Product L	Product M	Total	Total hours of production
1. 1981	a	71.1	77.7	113.3	52.5	48.4	362.7	477.2
2. 1982	a	64.8	86.9	114.0	42.0	44.1	351.8	
3. 1982	b	65.1	83.2	113.0	40.1	46.7	348.7	458.6
of which: VGMK		—	14.3	—	—	6.3	20.6	
4. 1983	b	80.2	64.3	143.7	47.8	78.6	414.6	
5. 1983	c	62.5	57.1	128.3	42.4	67.1	376.4	495.3
of which: VGMK		20.9	19.7	66.5	25.4	40.2	173.1	
indexes in percent		33	34	52	60	60	46	
1982/81 (2:1)		91	112	101	80	91	97	
1983/82 (4:3)		123	77	127	119	168	119	

a = in normative hours of the year 1981

b = in normative hours of the year 1982

c = in normative hours of the year 1983

unchanged, production increased by 19 percent. To this was added a reassessment of the norms implying an about 10 percent reduction which practically meant that the payment for VGMK activity also required a 10 percent increase in performance during the regular working hours. On this basis we assume that the entire increase of production may be attributed to having organized the VGMK work.

The 19 percent increase in productivity and output, which was, let us not fail to notice, backed up (not to use the term coaxed out) by an outflow of personal income amounting to 11.5 million forints on the level of Factory BX (and 10 million on the level of Beta Works) was equivalent to an additional price receipt of about 390 million forints in sales.* This represents about 5 percent of the Factory's total price receipts.

The surplus production and price receipts shown above have had manifold impacts on the factory. Two points are considered here: those shown in fixed costs and their wage aspects, and those related to exports settled in convertible currency.

The surplus of the value of output, i.e., price receipts, obviously entails relative savings. The overhead costs of Beta Works were about 140 million forints in 1983 and more than 600 million forints were the general overhead costs distributed on enterprise level according to the system of cost distribution adopted. The wage content of the overhead costs of Beta amounted to round 4.5 million forints while the share from that distributed on the enterprise level and debited to Beta Works (reckoning with an 8 percent wage rate) to not less than 50 million forints. Without the 19 percent surplus of

*Price receipts originating from the products of Beta Works amounted to 2441 million forints in 1983.

production, i.e., sales, 16 percent ($\frac{19}{119} = 0.16$) of these costs ought to have been debited to a smaller volume of output, i.e., sales. The value of the relative saving computed on the basis of additional production and sales could be estimated at round 0.16. $(140+600)=120$ million forints and its wage content at $0.16 \times 55 = 9$ million forints. Thus on the basis of this deduction it may also be stated that from the net personal income outflow of 11.5 million forints related to VGMK work, 9 million forints are balanced by relative savings in the fixed wage costs.

This business management-minded scrutiny does have a realistic content. The case can be interpreted as follows. The 19 percent increase of output (and the corresponding increase of sales) of Beta Work was carried out naturally with additional inputs (as seen above, within it with a surplus outflow of about 11.5 million forints personal income). On the other hand, however, the surplus appearing in output, i.e., price receipts, containing a proportionate quota of general overhead costs, decreased the cost ratios of other components of enterprise output by 120 million forints and the wage rate by 9 million forints. This is a most momentous correlation especially under business conditions where it is not typical of enterprises to pursue a systematic cutting of inputs, rationalization of enterprise apparatuses, or consequential reductions of staff, especially in times of recession.

The advantages the enterprise enjoys on the basis of increased price receipts from the trade transacted in convertible currency must be treated as an enterprise "benefit". This is a manifold advantage: expansion achieved in the non-rouble markets guarantees a better position in development opportunities, improves the enterprise's credit positions and creditworthiness. The 19 percent increase in productivity and output achieved by Beta Works provided for a surplus export against convertible currency worth about 100 million forints. According to our approximative computations this performance improved the wage position of the enterprise, through various transmissions, by another amount of about 4.5 million forints in 1983.

VGMK activity in Ro Works

The creation of teams

Ro Works was set up in Factory BX in the late 50s. Labour fluctuation was comparatively small; management and a good part of the labour force have been working together for about two decades which shows in the human-personal quality of working contacts. Relations between management and staff were considerably influenced by the fact that the patent fees, that had reached fairly high levels in earlier years, were formally and informally distributed not merely among the actual "carriers" of the patents but also among broader circles of the staff, including different groups of the workforce according to the given patent. The distribution was, naturally, accompanied by lots of conflicts;

however, discussions eventually developed a certain democratic form of distribution as well as cooperation and mutual trust based on common interests.

Production also involves natural (maturing) processes that require permanent control. Consequently, the production time of a batch takes months while running is continuous: work is done in three shifts and also on weekends. The precedents, i.e., causes of production troubles, usually cannot be spotted. Owing also to this fact, the management has tried to develop an incentive system for the Works in the frameworks of the enterprise for many years (decades) so that the extra availability of wages and bonuses for achievements provide a fund for a considerable remuneration of outstanding work, and that in this context technological discipline based on collective incentive as well as a flexible adjustment to requirements in the distribution and undertaking of work tasks might be established. Repeated attempts at the above were frustrated all over again after periods of a few months because of the limits of financial opportunities and, apparently more than once, because of the ungenerosity of the enterprise leadership. Public opinion in Ro Works has been up to now affected by these fiascoes (as repeatedly hinted at in interviews).

After the antecedents it ought to be considered logical that the management of the Works, relying on the big loyal majority of the regular staff of experts and skilled workers, recognized in the VGMK form a new opportunity to create collective interest in production and business. It must be also taken into account that the capacity of the first vertical stage, i.e., of the basic stage, was expanded by 40 percent by the installation of new equipment and the Works management hoped to engage the full capacity by enhanced intensity and by extending employment after the regular working hours. (As seen above, overtime was not appreciable in Ro Works in the years preceding the creation of the VGMKs.)

Upon the initiative mainly of the Works management and, of course, after painstaking calculation and bargaining with the enterprise management, 8 VGMKs, organized by workshops, were formed already in early Autumn 1982, covering almost every vertical stage of production, and comprising 135 persons (more than half of the manual staff). By 1983 the VGMK membership increased: more and more workers joined the existing VGMKs and, in addition, "Ro 9" comprising non-manual employees, was set up. In 1983 the membership of the 9 VGMKs was 185 persons according to the central records (this data was used in presenting the enterprise data). The records of the Works, i.e., of the VGMK council functioning in it, recorded 205 VGMK members as closing numbers in the year 1983 (which is 70 percent of the total staff).

VGMK internal relations and earnings

As mentioned above, close vertical contacts were maintained between the different Workshops and the activities of VGMKs organized accordingly. The output of the Works and thus the product of VGMK work is the result of collective activity. This holds for the

engineering workshop and VGMK "Ro 3" based thereon, furthermore, for the section engaged in research and mainly in preparatory and control activity and for VGMK "Ro 9" based on it. These sections attend to maintenance-and-repair to assure running, to the preparatory work required for starting up the production process as well as to continuous control during production. Naturally, the increase of production asks for higher labour intensity and strongly depends on the quality of the activities of workers in the workshops (and in their respective VGMKs). Practically only the outputs of the two workshops performing the last operation and of VGMKs "Ro 6" and "Ro 7" based thereon can be distinguished. These workshops, forming the last vertical section of the Works, are already specialized in the last finishing of the intermediary products received from preceding vertical sections.

The VGMKs signed separate but identical contracts with the enterprise adjusted to actual conditions and undertook to produce the necessary additional volume of commodities, covering almost the entire range of products of Ro Works. Here, too, remunerations were stated on the basis of the necessary input of normative hours. Depending on the deal with the enterprise management, an hourly remuneration of 80 to 90 forints was reached, computed with per unit normative hours valid in 1982 and 1981.

Accounts are settled with the company as follows. The hours directly used for the individual products are recorded both by the central and the Works' administration, furthermore, the Works also records the amount of hours spent on actual production of the given product after the regular working time. This latter volume of work is considered to be VGMK work. The quantity of the end product turned out is considered to be regular product or VGMK product according to the relative proportion between regular and non-regular working time. (More accurately: satisfying the requirement that production during the regular working time must be separated from VGMK production, certain batches of production are carried in bookkeeping through the production process as VGMK batches in the proportion between the regular and the non-regular work time inputs.) This system of accounting means that the results of enhanced productivity belong to the enterprise after the regular hours and to the VGMK after the VGMK activities. It will be seen hereunder that productivity strongly increased in Ro Works and this was also manifest in the magnitude of VGMK earnings.

The internal distribution of VGMK remunerations, naturally, also has a mechanism of its own, adjusted to the given conditions, as the gross VGMK remunerations paid by the enterprise are the total receipts of the 9 VGMKs together. In Ro Works the VGMK council is in charge of distribution. In the council each VGMK representative has the right to vote and also one representative of the Works management and one each of the social organizations functioning in the Works participate with the right of consultation. Distribution sets out from the number of working hours spent by every VGMK member after regular working time, i.e., from the total of VGMK working hours. The concerned VGMK, i.e., its member, is paid the gross amount of 80 forints per one hour of VGMK work. The remainder of VGMK receipts is distributed by the VGMK council by weighing and evaluating the actual performances of the different VGMKs, and especially of the

individual workers (VGMK members). The VGMK council has also begun to adopt the system, obviously suggested by the Works management, to use this amount of VGMK receipts to remunerate for the accomplishment of technological tasks stated in advance and attributed special business or economic importance (such as an "output rate" set substantially higher than the established rate, i.e., a higher output from a given quantity of basic materials.)

This system of distributing VGMK remunerations requires an active cooperation from the Works management. The "particular interest" of the different VGMKs, i.e., VGMK members in having such a system is to "acquire" as much VGMK working time for themselves as possible, even if at the expense of other workers. To avoid this, the VGMK council only recognizes the VGMK working time approved as such in advance by the Works management. Under such conditions the Works management might, on subjective grounds, favour or disfavour any VGMK. Furthermore: distribution of the surplus receipts (above the sum distributed on the basis of 80 Ft (VGMK working hour) by evaluating individual activities also requires consultation with, and consideration of the opinion of the Works management, as well as the reconciliation of disagreements. There exists the possibility of bias also in this respect. However, as distribution is decided by the VGMK council and thus the consulting and advising activity of the Works management as well as the recording of VGMK worktimes are under public control, the system could not operate without coordination and mutual confidence among VGMK members, VGMK representatives and the Works management.

Of course, there happen to be conflicts and even quarrels. Yet, as it will be seen, the given system ultimately assured the rational use of the VGMK form in Ro Works as well as an appreciable consequential growth of labour productivity and production.

The total receipts by VGMK Ro amounted to 8.470.000 forints in the year 1983. This means an average gross amount of 3450 forints/month per one VGMK member. In the best earning VGMK gross receipts amounted to 4200 Fts/month/person, while in that with the poorest average this was 3.100.

Records made available to us in Ro Works also show that the part of payments proportional to the hours worked represented about two thirds and the VGMK council distributed about one third after individual, or VGMK activity assessment, that is, for differentiation as it is said in Ro Works. Taking the given principles of distribution as a basis, this means that in Ro Works 1 hour spent on accounted VGMK work earned about 120 forints ($=\frac{3}{2} 80$) gross income, or over 100 forints of net income.

The net income of monthly 3000 forints (and potentially more), i.e., the complementary income which was seen above to be higher than 100 Ft/hr that can be earned at the regular work-place is no little money. Particularly if we consider that almost the entire staff of Ro Works is concerned.

The VGMK form as developed in Ro Works, with quite a lot of internal friction due to the nature of the matter, appears to be on the whole suitable for creating powerful interest in technological discipline, a flexible undertaking of work tasks adjusted to the

requirements of the production process, and high individual and workshop performances. On the other hand, it has created and operates a special system of autonomy and collective self-supervision in the form of the VGMK council.

VGMK work and enterprise benefit

Keeping in line with the above train of thoughts, it can be stated that in Ro Works VGMK activity in itself did not work towards the saving of overtime or such effects, if any, were negligible. Of course, it is also an enterprise benefit if additional income can be provided to the majority of workers in an important department. The point is the performance balancing this surplus income, i.e., the net VGMK receipts of about 7 million forints already paid out.

Production and productivity will be examined first.

The output of products was expressed for each year in terms of hours on the basis of actual per unit normative hours, i.e., the output of products was "priced" with the inherent actual volume of normative hours. Also the "value" of the output of products in the given period was calculated on the basis of the per unit normative hours. From the obtained output data of products expressed in hours the indexes of the changing volume of output and of changing productivity can be unambiguously stated. The results of this computation are summarized in Table 9.*

The data show a steady and in the year 1983 an extremely robust increase of the product output of Ro Works as well as of productivity. The growth of output expressed in terms of value was similar: the output of Ro Works amounted to 245 million forints in 1982 and to 390 million in 1983.

How much of this 145 million forints incremental output is attributable to the introduction of VGMK work? It would certainly be wrong to state that the whole of it, especially as the starting up of the new up-to-date equipment (which, as already mentioned, expanded the capacity of the first vertical stage of production by 40 percent) was in itself a factor in the increase of production, and of productivity. Relying on certain considerations which can not be explained in detail here it could be stated that about 60 percent of the additional output may be attributed to the fact that the VGMK system allowed the expansion of labour resources in the way presented above and that it was a factor also in the surge of productivity. It may therefore be stated that on the level of sales a *surplus production worth about 87 million forints* balances the potential net *purchasing power outflow of 8 million forints* originating from VGMK activity. This is the primary benefit for the enterprise. It can be emphasized that this surplus production of 87 million forints was made up of highly profitable products requiring very little direct material inputs.

*Some corrections were made in the original text (and data) for more convenient treatment. These corrections, naturally, do not affect the essential meaning.

Table 9
*Changes in the volume of commodity output and in productivity
 in Ro Works on the basis of the actual working
 hour content*

Year	Hour content of output				1000 hours
	in regular production	in VGMK production	total a+b	on the basis of per unit normative hours of year before	Change in percent productivity
	according to normative hours of the current year				$(\frac{d}{c} - 1) 100$
	a	b	c	d	e
1. 1980	275		275		
2. 1981	266		266	274	3
3. 1982	284	33	317	346	9
4. 1983	290	82	372	505	36

Volume indexes (preceding period = 100)

5. 1981/1980 (2 "d": 1 "c") 100 percent

6. 1982/1981 (3 "d": 2 "c") 130 percent

7. 1983/1982 (4 "d": 2 "c") 159 percent.

The output of Ro Works carried about 140 million forints of workshop overhead costs in 1983, furthermore, with the given system of distributing costs, 75 million forints of general enterprise overhead costs, with a total wage content of approximately 8.5 million forints. The proportional volume falling to the 87 million forint returns of VGMK activity was round 50 million forints, with a wage content of about 2.5 million forints.

We may state that without the increase of output attributable to VGMKs the input ratios of other components of enterprise output would have been 50 million forints higher in Ro Works. Furthermore, the outflow of 8 million forints of potential personal income originating from the activity of VGMKs in Ro Works in 1983 was accompanied by a 2.5 million forints decrease in wage costs elsewhere.

More than 80 percent of the output of Ro Works is marketed in the West. The additional exportable commodities turned out as a result of VGMK activity and accounted in convertible currency were estimated at about 70 million forints. Beside the favourable influence on the creditworthiness and development opportunities, and as a result of impacts also including the above ones, the wage payment opportunities of the Factory may be boosted by about 3 million forints.

Some concluding ideas

Facts have been presented and they can be evaluated and judged from several aspects. Here we should only like to discuss a few problems related to the facts that have been revealed and to the future opportunities of VGMK activities and employment.

(1) Although VGMKs are not profit-oriented organizations and, consequently, the economic efficiency of the production they are engaged in is indifferent from their point of view, it should be still regarded an important point what products the enterprise itself wishes to boost by employing the opportunities given by the VGMK form. The spheres of activities of Beta Works and Ro Works show significant differences with respect to economic efficiency.

In Beta Works 5 main products are manufactured, contributing three fourths of the entire output of the Works and over 80 percent of its exports, against dollars, and also the VGMKs are engaged in the production of these commodities. Our economic computations concerning the five main products have shown that in 1982, 1 dollar of export receipts was produced with an input of 52.8 forints, while 1 rouble of export receipts with one of 25.2 forints (the official rates of exchange being at that time 42 Ft/dollar and 26.5 Ft/transferable rouble).

Similar computations made for the 3 main products of Ro Works show a different picture. (These three main products require more than 90 percent of the total input of working hours.) Here the "cost" of 1 dollar of export price receipts was 30.9 forints and of 1 transferable rouble 15.8 forints.

Is it not a mistake if the enterprise uses VGMK work for increasing the output of low-profitability products or even of unprofitable ones?

In our opinion the given economic indicators show that the present structures of inputs and receipts, i.e., the structure of activity, should be changed in Beta Works. Of course, this does not mean to close down the Beta Works. What needs to be promoted and pursued with adequate business political back-up is to develop a range of products and markets suitable for enhancing economic efficiency, even if this implies a considerable decrease in the value of output, that is, *gross* returns, and the risk of certain hardships and losses in the course of readjustment—much rather than surplus production whereby the established pattern is conserved. This would be the way of making better use of the resources concentrated in Beta Works (meaning first of all the professional knowledge of the people working there).

It is, naturally, not the fault of the enterprise if efforts are not taken in this direction. The business conditions, as given in Hungary, make any otherwise reasonable withdrawal, like cutting back the gross returns in foreign exchange, nearly impossible, even if this entails an increase of net returns in foreign exchange. This is clearly a critique of the given management conditions. Having admitted this, we should still like to stress that the enterprise management must pursue and prefer undertakings that promote rational business. It must nevertheless get prepared for the envisaged state of affairs when

the position of economic units will increasingly depend on actual profitability and economic efficiency.

(2) The VGMK form is full of inherent contradictions. The most frequently quoted point is that while the wage for one normative hour in the regular working time is 30 forints, in VGMK work it is, let us be modest, 90 forints. However, this inconsistent form cannot be judged but in the context of the given inconsistent medium. The nearest relevant inconsistency of this medium is the following: "while in Hungary the average wage per hour is 30 forints in the "primary economy", a wage of 80 to 100 Ft/hour belongs to the lower range in the "secondary economy" even in a wage worker position.

In my opinion the progressive piece rate—let us call a spade a spade—adopted in the VGMK form is a response to this "environmental" inconsistency. The VGMKs functioning in the very field of Beta Works are wonderful examples. "Deliver 0.04 units of product I after each hour accounted as regular working time and you will be paid, say, 30 Ft/hour, i.e., 750 forints after 1 unit. For each subsequent unit manufactured in addition, you will be paid 3.2 times more, that is, 2400 forints". Let us not stop now to examine if there is or there should be any guarantee that under such conditions performance during the regular hours in excess of the normed volume should not be transferred by workers to VGMK activity, or that the regular working time should not be used for the thorough preparation of VGMK activity. If the per unit normative hours are defined realistically (as they were found to be in the scope of this study) then such kind of actually existing "irregularities" are simply unobjectionable from the point of view of rational management.

In business the relevant question never has any moral motives. The relevant question here is the following: is the system of progressive piece rates available in the VGMK form a proper response to the general inconsistencies of management under our given conditions?

(3) We believe that this is one of the possible responses which is certainly suitable and adoptable for a span of several years, even if it does not provide longer perspectives.

This is an adequate response because, with the given (though steadily increasing) price level it does not entail surging wage bills for state enterprises. Relative to full-time work the VGMK work is still of a mere marginal magnitude in the "primary economy".

It is an adequate response as it can help in disclosing the reserves actually present in the pores of the economy, the potential driving forces, or at least part of them.

It is an adequate response because in the range above the established level of performance enables enterprises of the "primary economy" to be competitive in the labour market where the "secondary economy" is an integrated part on the demand side. It is noted here that many workers interviewed verbally or through questionnaires stated that by availing themselves of the opportunities offered by VGMK work they gave up the secondary activities and resources of income they had previously had.

(4) The way enterprises use this opportunity, namely, the VGMK form, is not unambiguous either. Once again it is not primarily a moral point (although there must be

moral considerations as long as managers are involved) whether they use it or abuse it, as they say.

As it has been attested by this study, in the case of the VGMKs set up in Beta Works and Ro Works this opportunity is used well. VGMK activity resulted in actual additional output in ranges of production which are not clearly advantageous in Beta Works from the point of view of efficiency but very advantageous in Ro Works.

The enterprise management must nevertheless watch that, as it was excellently formulated by István Hetényi, Minister of Finance, in his Parliamentary address in December 1983, "the precise distinguishing of tasks specified for the regular working time from the activities of the business partnerships, the prevention of incompatibility and the rational stating of remunerations must be provided for also through involving publicity". Let us underscore that the Minister emphasized the need to distinguish *tasks* and not time or performance. (It may be added that it is often necessary to pay *ex post* remuneration for carrying out tasks that were impossible to specify before actual implementation.)

Once again this is not primarily a moral but a business point in which moral motives may, naturally, also obtain a role. An "inaccurate" or irrationally liberal delimitation of tasks entails the discrediting of the VGMK form (first inside the enterprise and only then in a broader range) and thereby the chances of using this form would be reduced or cancelled.

(5) What are the future chances for VGMKs functioning according to what was found in our study?

It is simple form they are the same as any progressive piece rate. Initially it really brings to the surface reserve performances but subsequently, probably on a higher level, it will operate new bargaining positions and new forms of withholding performance.

It can give much trouble to the factory if people get used to the fact that the management organizes VGMK work for them and thus guarantees their employment after the regular hours as well as the several thousand forints of monthly income paid for it. When this will have become accustomed to, then any change in the established pattern of activity, any creation of new VGMK centres because of actual business requirements and a consequential deprivation of certain partnerships from VGMK opportunities might entail bad conflicts.

In our opinion the way on which the Ro Works has started is the real perspective. VGMK work begins to get integrated there in the functioning of the Works. This line ought to be carried on. If it were possible to create a direct interest of producing teams in business also by means of the VGMK form, and to combine this with the development and operation of certain forms of self-management, then the new "VGMK" tasks would be formulated all over again by the changes in technology and the market themselves. Conditions ought to be provided also from outside for the opening up of this perspective—i.e., the condition that any unit functioning within a big enterprise or in a factory might attain the actual status of commodity producer.

ХОЗЯЙСТВЕННЫЕ ТОВАРИЩЕСТВА НА ВЕНГЕРСКИХ ПРЕДПРИЯТИЯХ: ИССЛЕДОВАНИЕ СИТУАЦИИ

Г. РЕВЕС

В 1981 г. венгерское правительство приняло целый ряд правовых положений, направленных на оживление мелкого предпринимательства. Эти меры, в частности, привели к возникновению формы т. н. хозяйственных товариществ, в рамках которых коллективы, состоящие из не более чем 30 членов, могут при сохранении своей основной работы — то есть по существу в качестве побочной трудовой деятельности — вести мелкую предпринимательскую производственную деятельность. Стало возможным организовывать хозяйственные товарищества и на крупных предприятиях; эти хозяйственные товарищества на предприятиях (ХТП), используя производственное оборудование предприятия (иногда арендуя его), могут с разрешения директора предприятия браться за производственную или обслуживающую деятельность. ХТП составляют значительную часть возникших мелких предпринимательств. В первой половине 1984 г. в Венгрии более 100 тыс. человек принимало участие в работе около 10 тысяч ХТП.

В статье дается конкретное описание и анализ деятельности ХТП, созданных в двух цехах одного предприятия. В 1983 г. более 20 процентов всех работников предприятия были членами ХТП; в двух исследуемых цехах эта доля составляла 80%. Число участников ХТП данных производственных цехов составляет половину общей численности всех ХТП завода. Дополнительные доходы членов ХТП равнялись 14% фонда зарплаты по предприятию в целом. 60% этих дополнительных заработков приходилось на долю членов рассматриваемых ХТП. В одном цехе эти доходы приблизительно совпадали с общей суммой заработной платы, а в другом составляли приблизительно половину.

В статье представлены фактические данные об организации ХТП в обоих цехах, о внутренней организации и распределении доходов в ХТП, рассматриваются производственные и общехозяйственные результаты, которых удалось достигнуть благодаря ХТП, и, наконец, дается оценка деятельности ХТП с точки зрения экономической эффективности.

На основе конкретных данных автор указывает на противоречия формы ХТП, отмечая, что на почве противоречий хозяйственной деятельности венгерских предприятий ее следует считать хотя и рациональным, но все же временным решением.

REVIEWS

"MEDIUM-TERM" PLANNING IN THE HUNGARIAN INDUSTRIAL ENTERPRISES (A research report)

G. PAPANÉK

Planning in industrial enterprises has been an organic part of the system of national economic planning in Hungary, ever since 1948. Between 1948-1968, however, priority was given to the economy-wide plans, the main targets of enterprise plans were derived, "broken down" from these, while enterprise planning was playing a preparatory, proposal-making, or a complementary and implementation-aiding role. During that period enterprises did not but make plans only covering one year.

The 1968 modification of the economic control system, however, while maintaining the practice of economy-wide planning, granted the possibility to state enterprises to work out their own future in long-term perspectives, and to elaborate their respective plans. As a result, in the second half of the 1960s,—i.e., almost at the same time as in other centrally planned countries [1],—the claim for autonomous enterprise management widely arose also in the Hungarian industry. The majority of the enterprises immediately started planning for a period longer than one year, though this was somewhat later than in the industrially more advanced countries [2, 3, 4]. In 1969 (according to a survey) [5] already 91 percent of the Hungarian enterprises had drawn up 3-year, and 65 percent 5-8-year plans. Later on, in 1970 a government decree, and in 1972 the Act VII [6] provided centrally that the larger enterprises make their own plans to cover more than one year. Thus, in the last ten years, all Hungarian enterprises drew up, even more than once, plans for periods longer than one year—most of them did so in 1981.

In 1981-83 the Research Institute of Industrial Economics of the Hungarian Academy of Sciences, together with the Institute for Planned Economy of the National Planning Office, conducted a survey regarding experience with "medium-term" planning by enterprises, the position, economic role, problems of and possibilities for further development of this planning work.* The survey included 11 enterprises of the basic

*On behalf of the Research Institute of Industrial Economics of the Hungarian Academy of Sciences Katalin Demeter, Éva Nádor, Péter Sárkány and the author, on behalf of the Institute for Planned Economy of the National Planning Office Péter Ákos Bod, Katalin Faragó and Mrs. Huszár took part in the research. A volume giving a detailed picture of the research is soon going to appear in Hungarian.

material industries (mining, metallurgy, energetics and building material industry), 18 engineering, 9 chemical and 12 food processing and light industrial enterprises. This range of enterprises consisted of 12 smaller firms (employing less than 1500 persons), 17 large ones (employing more than 5000 persons), and 21 medium-size enterprises. 70 percent of them were entirely independent and 30 percent belonged into the framework of a trust (holding company) or some other kind of enterprise group. In the course of the research project, data in written form, based on uniform and detailed questionnaires, textual information, opinions, or brief analyses were twice collected and often information was also gathered on the spot. Based on experience gained from the survey we compiled a research report; the findings and conclusions of which were then submitted for discussion to national scientific forums and forwarded to the economic control organs dealing with the development of national economic planning.

The research was aimed primarily at aiding the progress of the Hungarian economy. It set out from the fact that to solve the problems of enterprise management and planning when a period of several years has to be considered is an important precondition of developing domestic industry. The present paper wishes to present those results of the work which—by giving a comprehensive picture about the situation of enterprise planning in Hungary, the specific difficulties of businesslike enterprise management and their possible elimination,—may deserve general interest.

The time horizons of planning

According to the findings of the research, from the plans extending to several years, in the Hungarian enterprises the so-called medium-term (mostly five-year) plans had greatest importance. Yet in 1981 64 percent of the examined enterprises were already having 8 to 15-year plans—generally considered as long-term ones. Some enterprises even attributed “strategic” significance to these plans, i.e., in the course of drawing them up, they attempted to define targets for several years ahead. The majority of the experts involved in the research, however, deemed the forecasts of 8 to 15-year planning not reliable enough to serve as bases for decisions concerning longer periods of enterprise management. Regarding the longest possible periods for reliable planning the opinions listed in *Table 1* had been registered.

The five-year time horizon of planning (and that these plans are called medium-term plans) developed, on the one hand, in the wake of traditions from the earlier economy-wide planning and, on the other hand, on the basis of the claim to harmonize the planning work between enterprises and on the national economic level. Referring to the experience reflected in *Table 1*, however, a great part of the Hungarian planning experts deem it necessary to change the routine time horizon (see *Table 2*). It seems that this claim to selecting differentiated time horizons is largely in compliance with the practice developed in the most advanced industrial countries (though in the

Table 1
*Maximum possible planning periods in the main
 lines of planning*

Sphere of planning	Ratio of enterprises estimating the max. planning period in the given sphere to be			Total
	less than 5 years	5 years	more than 5 years	
	in percent			
Quantity of products to be sold				
— in the domestic market	34	26	40	100
— in the CMEA countries	27	63	10	100
— in the western countries	74	24	2	100
Selling prices	79	19	2	100
Material purchases	60	30	10	100
Production	36	30	34	100
Technological development	22	16	62	100
Investments	31	13	56	100
Manpower	46	30	24	100
Organization development	26	39	35	100
Profits and finance	59	35	6	100

Hungarian industry the opinion according to which time horizons shorter than five years are expedient is more widespread than it is in international literature.*

The above mentioned outstanding economic importance of the "medium-term" plans is borne out not only by the data showing the frequency of making plans but also by the analyses of the actual role of planning in the economy.

The role of the plans

The Hungarian legal regulations touch also upon the tasks of "medium-term" planning. Thus, the related guidelines [10] issued by the President of the National Planning Office state that the main task of the actual planning work is to determine the targets in connection with the development of the enterprise and the tools that can be used for implementing the targets. This formulation is at variance with the opinion that the medium-term plan should mark out the ways of implementing the long-term or strategic plans and analyse the partial tasks to be realized during the given period, but it resembles, in many respects, the views found in international literature about the tasks

*See the international data e.g. in [7, 8, 9].

of long-term or strategic planning [11]. (By putting the expression "medium-term" between quotation marks, the paper wishes to refer to this specific wording.) Besides, the provisions regulating the planning work of enterprises also stipulate that "The economic units are under obligation to determine their plans so as to . . . ensure implementation of the decisions contained in the national economic plans which affect their activities." They also oblige the enterprises to supply many-sided information to the control organs (mainly for the elaboration of the national economic plans [12]).

Table 2
*Actual time horizons of enterprise planning and those
deemed expedient by enterprise*

Planning period	Ratio of enterprises	
	making	deeming expedient
	plans for the given time period in percent ^a	
Less than 5 years	8	56
5 years	100	34
More than 5 years	6	10

^aSome of the enterprises have made plans for several time horizons; therefore the sum of the ratios is more than 100.

In the practice of enterprises the tasks of medium-term planning developed in a specific way. The actual role of the plan targets is demonstrated by the data found in Table 3.

The standpoint which attributes a guiding but numerically not obligatory character to the medium-term plan targets is in compliance with the "official" opinion of the Hungarian economic control agencies. Hence, it is perhaps natural that most specialists participating in the survey considered this practice (or opinion) to be correct. In one of the groups of enterprises asserting other concepts, namely in those handling the (particular) targets as obligatory ones, the actual situation can often be explained by the particular features of the enterprises belonging to this group. Namely, a number of large firms of the "basic material industries", almost necessarily implementing long-term programs, and organizations with restricted independence can be found in this group. (This does not contradict the fact that often the claims pressing for a more flexible economic management are also justly raised in these enterprises.) At the same time, from the presented data it is justified to draw the conclusion that the medium-term planning of enterprises is successful. This is also confirmed by statements of the experts involved in

the survey. In essence they said that their enterprise would draw up these plans even if central provisions did not oblige them to do so.

The above mentioned high share of enterprises and experts who consider the medium-term plans or some important parts thereof merely as general information or analyses, still shows unequivocally that in reality the surveyed plans only partially fulfil the role of either actually guiding the activities, or of serving as sources of information

Table 3
The role of medium-term planning

The role of plans	Ratio of enterprises	
	actually using the plan for the given role	deeming the given role as desirable
	in percent ^a	
Obligatory indicators	20	4
Minimum forecasts	16	16
Indicators of main lines of enterprise development, non- obligatory figures	70	78
Data for general orientation	26	34

^aSome of the enterprises use, or deem it correct to use the plan targets for more than one role. therefore the ratios add up to more than 100.

concerning the intentions of the enterprise. This conclusion is also supported by the experience of the research project that 28 percent of the examined enterprises enforced the aforementioned standpoint even in practice and consciously asserted in their work endeavours differing from those laid down in the plans. It was also in compliance with our findings that in the case of the examined enterprises obsolescence of the medium-term plans was rather frequent, while efforts to update them were very rare. The plans elaborated in the spring of 1981 were considered as obsolete (in details) already in the autumn of the same year by 72 percent of the enterprises. In the spring of 1983 no "medium-term" plan to be considered as valid at least in its main lines, was available at all with one quarter of the enterprises. And for the years following 1985 only 18 percent of the enterprises continued to lay down the plan figures from 1981 up to the present days. All this seems to be an essential difference from the practice evolved in the advanced industrial countries where the long-term plans are updated even several times a year. [13, 14] And because enterprises have obsolete, non-actualized plans, implementation of the tasks expected from the plans and orientation in the long run become jeopardized.

It is, at the same time, obvious that the distortion of the role of enterprise planning reduces the possibilities of purposeful enterprise management, hence it exerts very harmful effects on the results of the economy. Thus, to solve this problem of enterprise planning is an essential interest of Hungarian economy, struggling to increase its competitiveness. In the course of our research we also were aiming at finding the possible way of evolution.

The causes of the narrowing role

The current problems of long-term planning are often explained in the economic literature by the difficulties of forecasting, arising in the wake of changes in the world economy, specifically, by the problem of coping with increasing economic uncertainty. It seems, however, that the above outlined planning problems of the Hungarian industrial enterprises are the results of mainly other factors: the development of these factors was greatly attributable to an economic regulation which weakened the interest in long-term economic management, in some instances evoking expressly counter-interests. The expert opinions summarized in *Table 4* also emphatically demonstrate this circumstance. It is

Table 4
*The tasks to be solved through improvement of
medium-term planning*

T a s k s	Ratio of experts ranking the given task among the three most important ones in percent
Developing an economic control mechanism that stimulates enterprise management to consider longer time horizons	83
Improvement of information flow "from above"	65
Improvement of staffing the enterprise, or its planning department with experts	43
Strengthening the autonomy of enterprise (planning)	30
More active participation of enterprise management in planning	20
Increased material and moral acknowledgement for planning work	15
Increased participation of enterprises in central planning	15
Increased aid in methodology by the control organs	13
Widening the role of central planning instructions	—
Other tasks	15

commonly known that economic regulation can create an incentive working against an enterprise management which keeps eyes on longer prospects in the first line by largely taxing away the profits of successful enterprises and granting direct and/or indirect (e.g. protectionistic) subsidies to the less efficient ones. This is not unknown in the experience of the Hungarian economy either. Our survey revealed, however, that the disorders in connections between enterprises and central planning resulted in Hungarian industry in similar effects. (We have found, further, that the effects were almost identical when national economic planning, or, sectoral or trust (holding company) management were unable to establish adequate planning connections with the enterprises.) For, as earlier research works (15) already called attention to it, the tasks attributed to enterprise planning in Hungary may be divided into two groups, namely, tasks which are important for the enterprise and those significant from "central" viewpoints. We could also discover that in the course of carrying the tasks into effect—in the actual planning work—requirements contrary to one another ought to be asserted in several enterprises, and enterprise management is able to solve these conflicts (of interests) mostly by making "compromises" regarding the role of plans. At least, our findings can be confirmed by the following.

Of course, among the enterprises investigated there also were such where—according to the experts—the central will (that of the branch, the trust, etc.) could be asserted in the plans without any difficulty. In some, however, significant differences were found between the plan concepts of the enterprise and those according to central interests, and, not rarely, the decline in the guiding role of the plan had to be attributed to such differences. Our findings were also in harmony with conclusions of certain earlier studies*. Especially, a lot of such experience was obtained when we were looking for an answer to the question, how the obligation to supply detailed information on the plans and to submit the complete plans to the supervisory authorities affected the medium-term planning of the enterprise. Undoubtedly, approximately a quarter of the enterprises appreciated these commitments positively. For instance, senior experts considered it important that they were given a possibility to broaden their otherwise narrow "higher" contacts for acquiring information, for consultation and coordination, and for influencing the "image" formed by the control organs about their enterprise. Or, in some instances they expressed the hope that "approval" of their plans from above would increase the probability of realizing them (e.g. by obtaining the planned central resource allocations, or favours). Half of the enterprises had a neutral opinion or gave no opinion at all. In a quarter of the enterprises examined, however, they stated that, as the result of the obligation to supply planning information and to submit the plans, they "asserted the requirements raised by the national economic plan", "had put into the plans, or approached, the expectations", "took into account or fulfilled the claims of the controlling authorities" in their plans to a great extent.

*Similar statements were made for instance by [16, 17, 18].

An even greater number of critical remarks was recorded on the prescribed form for supplying the plan informations. Almost half of the enterprises were of the opinion that the data required by the supervisory authorities needed a lot of additional work and were exaggeratedly detailed also in the planning work for 1981. Though admitting that, in comparison to the methods of previous plan periods, certain improvement could be experienced, they still could find significant possibilities for further reducing the data supply obligations.

According to our experience it is also a problem to be solved in several enterprises that certain (primarily local and social) bodies are still accustomed to judging the performance of the enterprise and/or of its leaders by measuring the degree of plan fulfilment. This practice raises interest in withholding performance and in maintaining the risk-averting practice of planning. The effects of the outlined planning problems clearly appear, time and again, in the enterprise plans, too.

The subjects analysed in the plans

The information collected in the course of the research project on the objectives of management and on the tools to be utilized for achieving the objectives also give a clear-cut picture of the particular features of medium-term planning in the Hungarian enterprises. International and domestic experience [19, 20] with investigating such matters indicate, however, that enterprise management can often identify its main objectives with difficulty, since experts are inclined to adopt any "well sounding" objective as their own. Yet, the statements are rather characteristic of the enterprises' endeavours. It is an experience of our research worth mentioning as well that the aims of the enterprises declared in the medium-plans are well fitted to central evaluations, forecasts, guiding principles, marking out the topical objectives of economic management. According to *Table 5*, in 1981—in compliance with the position of the country in the world economy—frequent planned endeavours were to keep up, or, to expand the export markets (where trade is settled in convertible currencies), they also aimed at reducing the inputs of energy, materials, and, particularly, import materials. Enterprises were dealing with technological development as one of their main objectives more frequently than had been the case earlier, while the frequency of plans urging the extensive growth of production essentially declined.

The judgement of objectives declared by the enterprises, as listed in *Table 5* is, however, modified by the analysis of the planned arsenal of the means to be used for the implementation of the quoted objectives. In the course of our research we reviewed the methods planned for the implementation of 130 actual development projects considered most important by the enterprises. *Table 6* compares the data collected in this way with the results of an earlier survey [21] including 30 development projects. On the basis of what has been presented it is very likely that the efforts to implement the declared objectives were powerless in several enterprises. Hence, the frequency of enterprise

Table 5
Objectives accepted in the medium-term plans

Objectives	Ratio of enterprises deeming the given objective			
	in the 1975 plan		in the 1981 plan	
	very important	to be followed	very important	to be followed
	in percent			
Increase of production	80	2	36	36
Development of the product-mix	68	10	84	6
Development of production technology	62	26	70	20
Maintaining exportability of products	44	22	62	10
Increasing \$ exports	70	8	76	6
Increasing Rb exports	22	30	24	34
Increasing profit volume	88	6	80	12
Improving profitability	78	8	82	8
Energy conservation and material saving	42	48	74	22
Diminishing import consumption	34	46	64	28
Care for the employees	62	32	62	34
Increasing the income of employees	80	12	84	10
Improvement of enterprise management and organization	32	48	56	36

actions aimed at market research and at influencing the market has to be deemed very low for strengthening the competitiveness of Hungarian industry. Although the number of development plans reckoning with the implementation of some investment project shows a decreasing tendency, they still are more frequent than what would be realistic relative to the investment sources available to the national economy. At the same time, actions providing for actual technological development efforts are too rare. It is, however, obvious that enterprises may hope to attain their objectives and, especially, to fight successfully with their competitors acting resolutely in the international market only by exploiting every available opportunity to the maximum.

Table 6
Some tools intended for realizing the objectives

Tools	Ratio of the enterprises planning to use the given tool	
	in 1977	in 1982
	in percent	
Market research	50	57
Product development	70	63
Investment	83	69
Elimination of some production line	—	14
Marketing	37	35

Table 7
*Frequency of examining alternatives in elaborating
 particular areas covered by the plan*

Subject matters of plans	Ratio of enterprises using alternatives in planning the given sphere		
	Large	Medium-size	Small
	enterprises in percent		
Selling possibilities	42	57	59
Ratios within product-mix	17	43	59
within this: new products	25	38	59
Production volume	42	52	47
Price trends	8	38	53
Research and development	17	29	53
Investments and financing them	33	67	65
Material management	17	29	53
Labour and wage management	42	38	59
Cost level	25	29	47
Financial management	17	29	47
Terms of delivery, influencing the market	—	33	29

The fields analysed more deeply in the medium-term plans of the Hungarian enterprises are elucidated from another aspect in *Table 7*. It is characteristic that in most cases these areas are—also in compliance with international practice [22, 23, 24, 25]—investments and the ways of financing them, the proportions of the product-mix, price trends, labour and wage management. On the other side, factual analyses, many-sided considerations of the future regarding the questions of finance and marketing, are less frequent than it is customary in the advanced industrial countries.

The methods of planning

Earlier surveys [26] have already revealed that the formal framework of planning in the Hungarian industrial enterprises, comprising the planning organization, the order of elaborating and approving the plans, the traditions linked to planning methods, etc., took shape in the 1970s. Our survey also confirmed this finding. We have found that the plans are worked out in most enterprises with a wide participation of the senior management, i.e., the senior executives and heads of the functional departments of the enterprise. In 58 percent of the enterprises, however, 1–4 persons, in 34 percent 5–9 persons, and in 4 percent more than 9 persons are engaged as independent planners in medium-term planning (meaning that it is only 4 percent of the enterprises where no people specialized for the task are employed). In general, also the working collectives have the opportunity to make plan-recommendations or, to express their opinion on the completed plans.

The data bases serving for foundation of the plans and the arsenal of methodology used in information processing are diversified, though—as *Table 8* bears witness to it—the scope where these techniques are used is in fact not too wide.

The Hungarian practice of supervising the alternatives in the plans has already been demonstrated in *Table 7*. The opinion of domestic experts is that the frequency of these examinations is lower than would be desirable. Thus it is all the more conspicuous how widespread the efficiency analyses are in the medium-term plans which serve the purpose of selection from these alternatives. The range of the enterprises which employ the most frequently applied computations for a numerical measurement of efficiency is characterized by *Table 9*. In addition, most enterprises prepare non-numerical efficiency analyses too,—using a checklist [27] comprising several criteria. The analyses, however, often have no effective role in the plans, as it is also demonstrated by the insufficient frequency of alternative variants, and their being worked out is merely the result of definite central recommendations.

According to *Table 10*, also analyses regarding future uncertainty and the risks involved are not unknown, but they are not generally used in the Hungarian practice of planning, either. Furthermore, the almost entire lack of more sophisticated techniques, implying the possibility of making deeper analyses is worth of attention.

The outlined peculiarities of the methodology in “medium-term” planning seemingly support those findings of the experts involved in the research project which

Table 8
Frequency of some analyses

Survey	Ratio of enterprises making analyses extending to			no analysis
	0-40	41-60	61-100	
	percent of production			
	in percent			
Analysis of product life curve	38	14	20	28
International comparison of product parameters	38	14	34	14
Forecasting of users' (consumers') demand				
— in the home market	8	22	64	6
— in the CMEA countries	44	8	40	3
— in the western markets	58	10	22	10
Analysis of competition	54	8	18	20
Forecasting of market share	8	6	78	8
Forecasting of selling price	15	26	50	8
Forecasting of purchasing prices	34	38	32	6
Forecasting of rates of exchange	48	4	36	12
Analysis of new patents	48	2	16	34
Study of literature on the expectable tendencies in technical progress regarding the form's line of production	52	12	20	16

were presented in *Table 4* about the things to be done for the development of planning. On the basis of these data it might be considered expedient to extend the sphere of employing the uncertainty analyses (and to increase for this purpose the number of people well versed in the methods of applying them, etc.). It is obvious, however, that in enterprises where at present a realistic picture of the future and an efficient action program is not—or, not primarily—expected from the plans, only a growing interest in a management relying on long-term forecasts may result in a higher quality of planning.

Table 9
Indicators computed for the analysis of efficiency

Indicator	Ratio of enterprises computing the indicator	
	for 1981-85	for some other period
	in percent	
Profit per 100 Ft of sales returns	80	10
Profit per 100 Ft of value of assets	88	8
Profit per 100 Ft of wages	74	10
Breat even-point analysis	64	14
Costs of earning 1 Rb	54	14
Costs of earning 1 US \$	60	16
Profitability on national economic level	56	12
Total factor productivity	48	8
Pay-off of investments	—	22

Table 10
Methods of analysing uncertainty

Method	Ratio of enterprises using the method in planning	
	in some cases	in a wide range
	in percent	
Elaboration of several alternatives	38	22
Fixing the indicators within some range limits (from-to)	28	10
Sensitivity analysis	14	2
Risk discount	2	—
Simulation	4	6
Other methods	6	8

Concluding remarks

It is perhaps worth mentioning that for the Hungarian economy, which, besides central planning, is also aimed at exploiting the creativity of the working collectives, the research project formulated the following recommendation: in order to realize the objectives, the local and the central tasks of enterprise planning must always be clearly separated from each other. This means that the planning system has to allow for the expression and reconciliation of diverging interests. Namely, if we were to make efforts to the effect that the central will should reappear in formal plan-interconnections also in the enterprise plans, the assertion of the economic role of the plans would be further jeopardized. Hence, it is important that the enterprises receive the central planning informations without the claim to be formally reflected in the plans and that they should supply information on their endeavours (apart from the plans) which are important from the viewpoints of macro-economy. Of course, there is no doubt about the importance of implementing goals significant for the whole national economy, and of harmonizing centrally set objectives with enterprise intentions. In order to achieve this, first of all the indirect instruments of economic control, and the methods fitted to them,—expedient development of the system of incentives, adoption of the system of plan-contracts, etc.—may be recommended.

Of course, neither this paper, nor the research project were aimed at generalizing the Hungarian experience by applying it to the planning work of other countries. We think, however, that the knowledge of what we have expounded may be useful in any country where efforts are made at a powerful development of the economy, and primarily of industry, and where long-term forecasts and/or action programs are elaborated for this purpose on more than one level.

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BOOK REVIEWS

PETSCHNIG, M.: *A pénz értékcsökkenése a szocializmusban* (The depreciation of money in socialism). Közgazdasági és Jogi Kiadó, Budapest 1983. 340 p.

Lucky is the author whose chosen subject-matter is sure to be as highly topical at the beginning of his (her) research as at the time of arriving at partial results or when drawing the ultimate conclusions. The phenomenon of inflation is a chronic disease of contemporary world economy, occasionally turning acute and so far incurable by any economic or fiscal policy measure. At best, symptomatic treatment could be given to it. Realizing this "given situation", Mária Petschnig could take it for granted that her comprehensive treatise would not get outdated for a long time.

The structure of the book follows the dialectic method of analysis proceeding from general to specific. As early as in the introduction the intention is stated to disregard the unfavourable impacts of world economic inflation on the socialist countries in the course of the study. Instead, the author would try to find the intrinsic reasons for the devaluation of the socialist money.

The author refuses to apply the notion of inflation with respect to socialism, and chooses to use the terms depreciation of money, reduction of purchasing power, erosion of money, etc. Analysing the ways in which the depreciation of money presents itself the phenomenon of the general rise in the price level is explained first, actually being a "form of depreciation of money that can be quantified".

In the context of the different types of *price rises* the notions of continuous, intermittent and concealed rises are discussed in brief. Forced saving

is considered to be a specific form of the depreciation of money, one which is difficult to state but which is at the same time closely associated with commodity and service shortages of certain periods.

The author devotes a full chapter to the analysis of *factors unleashing the depreciation of money*. It is fortunate that prior to presenting the socialist components of the issue an outline of the major capitalist theories of inflation is given. In connection with the depreciation of money in the socialist economy she demonstrates the impacts of present-day *technical progress* which work in this direction and which are difficult to quantify. "This point is particularly intricate and practically impossible to follow up because also unnecessary additional input-enhancing workings of technological development, such as the inflated costs due to disorganization, failing adaptation, oversize capacities, irrational savings carried out with the slogan of rational savings, and so forth."

Environment protection as a new socio-economic symptom of the times also affects the purchasing power of money because it introduces a trend of deteriorating it from the side of growing costs, to different degrees but irrespective of social systems.

From the point of view of the theory of money it is indispensable to analyse *the role of the bank*, especially in the light of the socialist economic bank monopolies. The author studies this host of problems from the aspect of what actual "power" is lent by the banking monopolies to the socialist central bank—and the conditions and degrees of the assertion of this "power".

The greater part of the volume, more than half of its length, consists of an analysis of the *functioning system of the socialist economy* or, more precisely, the components of the deprecia-

tion of money following from the system of objectives and instruments of the socialist economy. In the course of her research work the author understandably exceeded the analysis of the monetary sphere in the strict and narrow sense and also raised several comprehensive problems belonging already to the sphere of general sociology.

For example, the objective of equality between members and sections of society is covered in a completely separate chapter. The author often uses *model systems* for the purpose of an unambiguous explanation. She did so especially in the presentation of the system of objectives and instruments of the economy, emphasizing the logical superposition of the parts and the whole. The notion of state enterprise and the prompting of entrepreneurial activity, as well as the attached interest relations are expounded. Concerning the current system of enterprise organization the following is stated: "With the conventional rules of the game, under the patriarchal relations between the state and its enterprises it is more comfortable to be a big enterprise than a small one, even if this is only expressed in quantitative dimensions. The big company, namely, needs to be attended to, its size commands that its failure must be ruled out, its position is more advantageous when allocations are made, while taxes levied can be reduced owing to its stronger bargaining position."

In the course of discussing the system of objectives and instruments the author underscores the "demand inflating" and "cost inflating" impacts of *investment projects*. She is of the opinion that the cyclical nature of investment is in itself a factor working towards excess demand while it "strengthens the growth of inputs". Moreover: "The cyclical nature of investment introduces a pulsation into a broad range of economic activities and this results in tensions in the exploitation of capacities as well as in the internal and external markets".

Mária Petschnig selected the analysis of the probable role of monetary correction as the closing idea of her treatise. An important statement made in this chapter is as follows: "The basic premiss to be solved in this respect is that any form of

manifestation of the decreasing purchasing power of money implements an unfair redistribution between members and/or strata of society. Redistribution acquires this unfair quality because it thwarts, with a power depending on its magnitude, the assertion of the principle of wage payment by performance."

In connection with monetary correction the varying use of indexing is reviewed over history, and then the following personal opinion is stated: "Indexing is like analgetics, not suitable for curing the disease but makes it bearable. This is no small thing either, although health is better than drug treatment and a stable price level is better than indexing."

M. BRÜLL

CSIZMADIA, M: *A vállalati struktúra új vonásai az élelmiszer-gazdaságban* (New features of enterprise structure in the food economy). Közgazdasági és Jogi Könyvkiadó, Budapest 1983. 295 p.

The author presents the enterprise system of the Hungarian food economy* and the changes and trends of development as from the 1970s in seven chapters. The new trends are charted in detail: in her study the author devotes more space to the analysis of enterprise associations, cooperations and integrations than to the commoner organizations like state farms and agricultural cooperatives.

Chapter One gives a point of reference for the study of the structure of organization. It deals with the principal grounds of the social and economic conditions of agricultural production, with special respect to the functioning of cooperative farms. "The Hungarian cooperative policy is based on the principle that in established socialism what social advancement requires is not a profound changing of the socialist conditions of ownership but their consolidation, the strengthening of both state and cooperative ownership, promotion of their common feature and close cooperation between state and cooperative enterprises." (pp. 16–17) This is a most remarkable statement, since during the past decade the Hungarian agricultural

*In this context this term covers agriculture plus food processing.—Ed. note.

cooperatives have given new proof of their stamina, quickly and more promptly responding to changes in economic regulations than state farms, through rationalization of the ever more expensive primary energy and adjustment of the pattern of production.

In *Chapter One* the role of the human factor is also scrutinized and the number, age composition, living circumstances and professional training of agricultural earners are analysed. Along with a review of the favourable changes the author notes that in industry and building industry, there are twice as many experts of higher qualification per one thousand employees than in agriculture and that also the proportion of skilled workers is lower in agriculture. Reviewing three decades of development of food industrial production the author emphasizes the changes in the structure of production of agricultural enterprises and the expansion of non-agricultural production in the "post-reform" period, i.e., after 1968. She states that within base activities, animal production generally developed at a higher rate than plant production. Achievements in plant production originated mainly from the increase of yields but the sowing pattern was not altered appreciably. Till the mid-1970s the development of food industry fell below the industrial average. The growth reserve typical of earlier years—the increase in employment—was depleted. In recent years the expansion of production has derived completely from higher productivity. The productivity of the Hungarian food industry is lower than of the Austrian one, although the results of a few branches (meat, processing, bakery, wine industries) are better.

Chapter One ends with a critical analysis of the principles and practice of economic regulation. Control authorities influence the formation and magnitude of enterprise incomes and also affect the income distribution within the enterprises. The following important statement is made: "... the economic control prior to 1968 cannot be described as a system of direct control, nor is control presently administered solely through indirect regulation". She goes on to say: "even in the current economic regulation valid since 1980 control through the breaking down of the plan is oversimulated."

Several recommendations are made by the author to eliminate the prevailing restrictions, especially the stipulations concerning the formation and use of incomes are considered to be exaggerated, leading to situations where "not much is left... for the purpose of centralization" (p. 64).

Chapter Two, dealing with the enterprise structure of the food industry and the hard way of its evolution, is perhaps the most important one in the treatise of Ms. Csizmadia. "The forming of socialist food industrial companies began in the late 1940s and was carried out gradually till 1953 through the nationalization of the relatively few big enterprises as well as the several hundreds of medium-sized companies, small factories and processing plants, where manual work had predominated. Later on, in the early sixties, a new major reorganization took place also in the food industry and trusts (holdings) and nation-wide enterprises were set up." (In the late 1970s it was postulated that the overcentralized sectoral trusts would have to be wound up. The main reason was that the firms within trusts had little autonomy and the centralization and redistribution of enterprise profit resulted in levelling. Aiding the weak counteracted enterprise initiative and risk-taking, and ultimately hindered the improvement of efficiency. The book gives an authentic review of the reorganizations carried out in the early 1980s.

In *Chapter Three* the several decades long history and production results of state farms and agricultural combines are covered. Substantial budgetary funds were allocated for the creation of productive assets which could not be exploited with satisfactory efficiency for a long time. After the second half of the 1960s yields were better, especially of wheat, maize, apple, and milk. However, this was accompanied by very high costs. The capital intensity of production steadily increased while capital efficiency has only recently improved. "However, the amendments of regulations drawing away incomes beyond the capacities of the farms prevent this process from asserting itself with full vigour."

The author also points out that in a good part of the state farms income is low and only a quarter of them can afford development from own funds.

The equipment and economic results of combines are analysed in comparison with state farms. Business indicators show that the point is not simply a change of name but that the combine is a big enterprise organization concentrating the forces of production and vertically interlinked activities (production-processing-marketing) to a high degree. Beside the combines are making use of the opportunity offered by the 1981 amendment of the Enterprise Act: specialized teams, sections run under contract, enterprise business partnerships and other small ventures were organized. Their mechanisms and modes of functioning are presented in the chapter in concrete terms.

The internal and higher control of state farms is the closing idea of this chapter. With the development of the forces of production also the system of management changes. "There do not exist two state farms with identical internal organizations." Business organization according to the territorial principle is common and also the one according to the sectoral (branch of cultivation) principle is more and more widespread. The author is of the opinion that the viable forms of organization are those best suitable for the most efficient achievement of the set economic objective and with the fewest of management levels.

Chapter Four deals with agricultural cooperatives. After a short review of the organization period of cooperatives, the author analyses the economic results of the cooperative farms. She states that half of the concentration of production was attributable to mergers and another half to growth through accumulation. In comparison with state farms and industrial enterprises the Hungarian cooperatives still fall into the category of small and medium companies. However, the wide use of new technology is not prevented by territorial dimensions but much rather by the fact that "... the available machines were not sufficient in number and quality and the available professional knowledge was not sufficient for the economical operation of the given means of production."

Owing to different natural and economic conditions results are differentiated also in the cooperatives, like in state farms. More than half of the cooperatives are occasionally troubled by

disturbances of reproduction. Only 29 percent of them was capable of providing the conditions for expanded reproduction from own funds. The author mentions that the profit level was low even in the stage most advantageous for increasing production, taxes significantly increased and the agricultural price scissors opened wide. She notes that the internal resources and the reserves of enhanced savings are about to be depleted in the food-processing industry, in the state farms and in the cooperative farms alike.

Chapter Five is an analysis of the activities of household-plots and auxiliary farms. The author proves with data of the Central Statistical Office that each major section of the Hungarian society participates more or less intensively in this activity. In the majority of agricultural cooperatives household-plots production is an autonomous department and also specialized teams are common in which, beside cooperative members, everyone engaged in small-scale production participates.

Small-scale production is still of great economic importance. It greatly relieves the trade in food by using half of its output for household purposes. In several sectors it heavily contributes also to increasing the central stocks. Small-scale production is more differentiated than large-scale farms. It is, therefore, important that small farms of the hobby, social and expressly commodity producing types be distinguished from each other by the economic policy. Relations with the latter ones must not take social (benefit) forms, they have to be strictly businesslike and based on mutual advantages just as relations between commodity producers generally are.

The income of household-plots and auxiliary farms is complementary income 30 percent of which goes to industrial workers. The author shows with the aid of 1975 data, unfortunately without stating the source, that one third of the total income earned by the cooperative peasantry originates from household-plot farming, while small-scale production is of a lesser weight in incomes of other strata. Its share is the smallest (only 4 percent) in the case of intellectuals. The income per unit of worktime input of household-plot farming is below the average of earnings from the large-scale farm.

Chapter Six, the longest in the book by M. Csizmadia, explores associations, cooperations and integrations. The advantages offered by concentration and specialization are no longer limited to internal enterprise processes but business is penetrated by intra-enterprise relations all over. The author challenges the misbelief that vertical integration is not viable but when it is initiated and controlled by the industry, trade or banks. She finds the following to be the ways of promoting cooperation: technical and management service, offering services to the public and an integrated regional development, covering both small-scale and large-scale units.

There are two approaches in the judgment of contractual relations. According to the first one a contract is not an integration unless it produces an integrated organization. According to the second view the contractual system is considered one, or at least a primitive, form of integration. The authoress is of the opinion that the contractual relations are integrational relations and are most suitable for promoting the organization and planned character of business. Contracts have recently been enriched with a new content, already implying efforts at integration such as: industrial and trading companies procure feedstuff slowing seeds and live animals for agricultural producers, they cooperate in the investments and updatings made by agricultural enterprises, cooperate in exploiting the means of transportation, and assign certain operations (dehydration, cleaning) to the agricultural units as commission work.

Associations are also a typical form of intra-enterprise relations. Most of them are not independent legal entities, nor are for example the production systems. The agroindustrial unions integrating production and development of member farms in geographic proximity are associations of the regional and not of the sectoral kind. Also of the regional kind are the associations uniting a few farms in small regions to coordinate the carrying out of common tasks on neighbourly grounds. As a rule, they try to achieve a higher efficiency in production without a "special administrative organization".

The food processing enterprises' aspirations at association used to be restricted by statutes. At present no such barrier exists, but the scarcity of resources is a powerful impediment. Owing to the

low profitability of food processing activity the large-scale farms have also not sought associated cooperation with food-processing companies. Despite the said difficulties there are a few examples of the kind, especially in the poultry and dairy industries. According to the author it would be especially reasonable to promote cooperation between agriculture and the food processing industry in fruit and grape processing as well as in the cooling (refrigerating) industry.

Beside building industrial, wood processing and trading unions, the R&D associations are a new variety. Through their activities they serve the strengthening of relations between science and practice and the enhancing of economic efficiency. 13 such unions existed in the country when the book was completed.

Chapter Seven contains statements and closing ideas. A short summary of only 17 pages is given of the productive activities and organizational systems of numerous business formations in agriculture and food processing.

The book of M. Csizmadia presents the result of research over several decades. The big variety of organizational forms is presented with the aid of a wealth of clear statistical data.

É. SZABÓ—MEDGYESI

FAUSTO, D.—MINERVINI, G. (eds): *Public enterprises*. Liguori Ed., Napoli 1983. 213 p.

The control of public enterprises raises a lot of similar problems in different economic systems despite their essential differences. That is why the studies prepared for the 1981 Warsaw symposium, where professors of law and economics of the universities of Naples, Rome and Warsaw participated, are interesting. Special organizational and management problems of Italian public enterprises, repeatedly investigated in West-European countries, too, may be of particular interest. Reviewing all the papers or even major issues dealt with in the volume would exceed the framework of a book review. Therefore, only a few such ideas will be raised that seem to be analogous with similar problems of economic control and management in Hungary, thus risking the danger of subjectivity.

Almost all Italian authors (especially S. Cattaneo, S. Sciarelli and S. Stammati) emphasize that while Italian public enterprises are run, on the one hand (theoretically), under identical conditions as private enterprises, considered as ventures, on the other hand they also serve as a tool of economic policy enforced through state agencies, among them the proprietary establishments (*enti di gestione*). This leads to a dual control. One is exercised by market mechanisms within the framework of civil law, while the other one by the hierarchical system of state political control.

The highest level of state political control is Parliament. Recently, rather powerful endeavours have been aimed at extending the role of Parliament in the control of public enterprises. The second level of state political control is the Government, mainly two inter-ministerial committees for economic planning and industrial policy (CIPE—Comitato interministeriale per la programmazione economica; CIPI—Comitato interministeriale per la politica industriale). The third level is the Ministry of State Shareholding (Ministero delle partecipazioni statali)* transmitting economic policy guidelines of the Government towards proprietary establishments of the state and spelling out these guidelines for them in concrete terms.

The three big Italian public enterprise groups under the supervision of the Ministry are IRI (Istituto per la Ricostruzione Industriale), ENI (Ente Nazionale Idrocarburi) and EFIM (Ente Finanziario per la Industria Meccanica); they are holding companies with similar inner structure. The fourth level of state political control is formed by those proprietary establishments which are made up of the highest leading organs of state holding companies as the President, Board of Directors and the so-called Consiglio Syndicale, i.e. Supervisory committee.

Members of the *Board of Directors* (5 with IRI and 13 with ENI) are appointed by the minister of state shareholding and the most important matters of the holding belong to their competence, such as the annual budget, the financial plan, division of profits, bond issue.

The *President* (and Vice-President, respectively)—simultaneously being also the Chairman on the Board of Directors—represents the holding against third parties as a state proprietary establishment.

The *Supervisory Committee* is the central agency of the *internal* control of the holding whose members are nominated out of officials of government institutions and financial auditing experts. The Committee controls the accounting, management and finances of the holding, approves (quantitatively) the balance-sheets, the financial draft for bond issue, et. It should be noted that one member of the Board of Directors, too, is appointed from among members of the supreme state organization of financial control—Corte dei Conti.

Operative activity following (carrying out) the guidelines issued by the Board of Directors as well as the entire enterprise apparatus are directed by the *general manager*, himself though not a member of the state proprietary establishment (thus neither of the Board of Directors), but his key-role in the management of current affairs is best indicated by the fact that, for example in the case of IRI, he is appointed by the prime minister. As against the *collective* solution of top-level principled direction and control of holdings through the Board of Directors and the Supervisory Committee, an *operative one-man management* is enforced in current affairs.

With IRI a so-called Presidential Committee (Comitato presidenziale) and with ENI an Executive Committee (Giunta esecutiva) are placed between the President and the Board of Directors. According to S. Cattaneo (Les "établissements gérants") "*enti di gestione*" (des participations de l'Etat en Italie.—p. 130) this results from the bigger size of both holdings, furthermore from the endeavour that other government agencies (ministries) also get a place in the state proprietary establishments.

All the three Italian public enterprise groups are headed by holdings, as we have seen, which are made up of divisional or sub-holdings, while these latter again include enterprises mostly belonging to

*It should be noted that a series of so-called autonomous public enterprises and, for example, ENEL (Ente Nazionale di Energie Elettrica—public industry of electric energy) are not subordinated to this ministry, but directly to the functional ministry.

the same branch (or industry). The problem of control and independence of public enterprises arises in two respects. One is the independence of enterprises from (and control by) state power and administrative agencies (government, ministries), while the other is independence from the enterprise organizations made up of several enterprises, as holding, trust or concern. According to S. Sciarelli in the case of IRI both the holding and the sub-holdings have a limited decision-making authority, "... the single firms... represent the real managing centres within the group." (An outline of the organizational structures and management strategies of state holding companies. p. 156.) This impedes the utilization of synergic possibilities of IRI enterprises engaged in a lot of industries, since IRI can be regarded as a real "conglomerate". The situation of ENI is more favourable as regards these possibilities, as production is more homogeneous and, accordingly, management is more centralized in the holding and sub-holdings.

With IRI engaged in several industries and mainly in the competitive sphere, the maximum independence of enterprises seems natural, as does the greater centralization of decisionmaking authority into holding and sub-holdings with ENI whose main field of activity is the production, purchasing, processing and sales of crude oil and natural gas ensuring the energy supply of the entire country as well as the nuclear energy industry. Hungarian proposals for the creation of independent state proprietary organizations have also recommended similarly deviating solutions for the competitive sphere and for enterprises of so-called public utility character (e.g. energy industry).

The particularity of the organizational system of Italian public enterprises is not only that the function of the state proprietor is exercised by holdings and—as Prof. S. Sciarelli also stated (p. 156)—IRI 'is within them a real conglomerate, including enterprises working in most diverse fields and industries (which practically holds also for EFIM). Hungarian concepts emphasizing the necessity of creating independent proprietary organizations considered rather "business" and "credit" banks as the most suitable forms (S. Kopátsy, M. Tardos). The author of the present review tried to prove the inadequacy of this solution by pointing out the differences between

the interest of enterprise proprietary and those of bankers. At the same time, the possibility of establishing holdings has been raised also in Hungary as a possible form of state proprietary organization (T. Sárközy, M. Tardos).

Italian state holdings—as indicated by D. Fausto in the volume of studies—got into serious financial troubles during the 1970s, with deficits amounting between 1973 and 1978 to 6–7 percent of their total turnover. (The finance of Italian public enterprises, p. 201.) The reason for this should be sought after, apart from world economic crisis, not only in "non-own obligations" (oneri impropri) imposed on them as a tool of the economic policy of the state, but also in "specific inefficiencies in business management" (p. 210). Besides, the necessary transformation of the industry requires considerable subsidization of public enterprises which was the case in other West-European countries, too. On the other hand, Italian state holdings are mostly criticized because they make their profits—65 percent of which they should pay to the budget—disappear by regrouping them from profitable enterprises to losing ones. Similar phenomena are known in Hungary in connection with the trust organization and management of enterprises. We think that with state proprietary holdings this is a real danger that ought to be reckoned with. Its prevention may be furthered by legal regulations similar to the British Companies Act prescribing for holdings to publish financial statements for both the entire group and the individual subsidiary companies.

S. Sciarelli finds a way out of the acute crisis of Italian public enterprises in 1. the creation of a proper balance between economic policy and purely economic (business) viewpoints, 2. management in entrepreneurial way and 3. comprehensive strategic planning (p. 166). With more or less emphasis the same factors may also be found in Hungarian concepts on the further development of the economic reform. It is very interesting that IRI is mostly criticized because it is not able to realize an efficient plan coordination of its enterprises on the basis of its own development strategy, though this simultaneously means that it does not restrict the independence of its sub-holdings and subsidiaries which seems to be one of its most attractive features for us.

Entrepreneurial management is an indispensable condition of profitable enterprise activity. According to Italian authors "managers" and not administrative "bureaucrats" are needed. Prof. Andrzej K. Kozminski drew attention to deeper "philosophical" roots of the conflict between management and bureaucratic hierarchy by confronting deterministic and stochastic views with each other (Management problems in the socialist economy) (pp. 170–171). Thus we have come finally to the idea that at least one—even if not the most important—component of organizational and management problems of public enterprises should be sought after in the "human factor". This statement is agreed upon also by those working on the further development of the Hungarian economic reform.

N. ROTT

BREUSS, F.: *Österreichs Aussenwirtschaft 1945–1982*. Institut für Angewandte Sozial- und Wirtschaftsforschung—Signum Verlag, Wien 1983. 700+XXVIII p.

Fritz Breuss has written an unusual book. It is unusual because on the one hand it is a manual, owing to the variety of topics reviewed by the author, but on the other hand it is much more than merely a manual, owing to the excellent processing of a huge amount of literature, presenting results of the author's and other Austrian scholars' research.

The author gives a detailed review of the domestic legal, institutional and economic policy frameworks of Austria's foreign economic relations after the Second World War, also mentioning relevant events of the world economy and of the West-European economic region specially important for Austria.

The book becomes especially interesting, when, after these introductory chapters, the author outlines the most important foreign trade and international financial theoretical schools developed up to now, and then compares the results of empirical investigations carried out with the starting theses of these theories on the basis of his own analyses and those of Austrian researchers. In the course of comparison not only the

performance of Austrian foreign economy is tested in various approaches but different theoretical schools are weighed up as well. Differences between reality reflected in statistics and hypothetical expectations may be attributed not only to the atypical foreign economic performance of the country examined, but also to deficiencies, eventually errors of theory.

Even a detailed enumeration of all the hypotheses and statistical analyses serving for their testing would exceed the framework of this review. Let us only present two interesting chains of thoughts and the results of their statistical verification as an illustration.

One trend of foreign trade theories divides foreign trade turnover into two groups, inter- and intra-industry trade, respectively. A typical example for the former is the exchange of PVC powder for automobile spare parts, while the exchange of PVC powder for PVC tubes or that of automobile spare parts for other automobile spare parts belong to the latter. The smaller the difference between exports and imports of products of individual branches (groups of commodities) the greater is the share of intra-industry trade in the entire foreign trade turnover.

Inter-industry trade may be relatively well explained by the deviating technological levels and factor endowments of countries trading with each other. However, in the trade between highly developed industrial countries—within this mainly in the trade in manufactures—*intra-industry trade* gains increasing importance resulting from benefits induced first of all by "man-made" economies of scale because of the very similar technological level and factor endowment of the countries participating in trade. Reversing the logics of theory, the statement can be risked that the greater the share of *intra-industry turnover* in the foreign trade of a country the higher the development level of this country and the more up-to-date her participation in the international division of labour will be.

The share of *intra-industry trade* may be computed with various methods and concrete results will differ also independent of the method of computation according to the aggregation level of statistical data of industries (commodity groups). The lower the aggregation level of industries (commodity groups) drawn into the

analysis, the more authentic—and naturally lower—the indicator expressing the share of intra-industry trade will be.

The role of intra-industry trade in Austria's foreign trade was also computed with several methods. On the basis of indicators of different type this amounted to 50–60 percent in the 1950s and to 64–67 percent in the second part of the 1970s.

Intra-industry trade is especially important in trade in manufactures, i.e. in fields where the greatest possibilities are given for "man-made" economies of scale. In Austria's trade in manufactures the share of intra-industry trade amounted to 85–86 percent in 1981, or, according to another computation made with data of lower aggregation level, to 76–82 percent. Another computation made with lowest aggregation for the average of the years 1976–1978 indicated a 66 percent share of intra-industry trade in the exchange of manufactures. This Austrian figure may be compared with relative values of some other West-European countries computed for 1977 at the same level of aggregation. The lowest value of this indicator could be observed with Switzerland, amounting to 57 percent, and the highest in the case of France, amounting to 75 percent. The corresponding Austrian indicator was lower than that of Belgium, Luxemburg, Holland and Great Britain, and higher than those computed for the foreign trade of Italy and the FRG.

An important hypothesis connected with intra-industry trade is that its share increases more rapidly if a given country trades with partner countries belonging to the same economic integration than in foreign trade with member countries of another integration.

Computations made for Austrian foreign trade unambiguously confirm this hypothesis. Intra-industry exchange developed much more dynamically in the trade with EFTA-countries between 1960–61 and 1972–73 than in that with member-countries of the EEC. Following the 1972' agreement customs duties imposed on manufactures were gradually eliminated between EFTA and EEC. As a consequence, intra-industry turnover considerably increased in Austria's trade with EEC-countries between 1972–73 and 1980–81, while in the trade with previous, then

exclusive, integration partners a slow-down in the growth of intra-industry exchange could be observed in the period examined.

It results from Austria's dimensions that the author pays special attention to the theoretical trend examining differences between benefits and disadvantages resulting from foreign trade for "small" and "big" countries, respectively. According to a group of theoreticians "small" countries participating in world trade under conditions of free trade are in a less advantageous situation than "big" countries. With the increasing share of intra-industry trade the role of "man-made" economies of scale becomes more and more important, thus there will be better conditions for enterprises located in countries with a large domestic market, while less for enterprises of a small country. This concept implies that big enterprises, capable of making use of economies of scale, will be founded in "big" countries or will be located there. This might be true only in a general sense, since, example, the "small" Switzerland attracts big enterprises with tax concessions, while other small countries, like Austria, try to entice big enterprises through taking part in the international competition of granting subsidies.

The author raises the problem that if the hypothesis outlined above holds, then also the statement ought to be verified that the "bigger" a country the better trade performance she should achieve in intra-industry trade, and since intra-industry trade has a very considerable share in total trade, also in the latter. Foreign trade performance of various countries can be measured and compared by computing the ratio of the balance of trade and of the current account payments related to the GDP. The indicators computed support the above hypothesis: in case of the group formed of "big" OECD-countries (USA, Japan, FRG, France, Great Britain, Italy and Canada) the balance of trade and of current account payments expressed in percentage of the GDP was positive from 1960 to 1975—varying between 0.08 and 0.28 in the average of five years—, while in the case of another group formed of 16 "small" OECD-countries this indicator was always negative between 1960 and 1981 in the average of five years ranging between –3.38 and –4.19. Considering the balance of payments aspects this also implies that the group of "small"

countries was net capital importer, while that of "big" countries net capital exporter, over the period examined. The indicator refers to the *average* of foreign trade performance of countries belonging to the two groups, while according to individual data values deviating from the group average both in sign and order of magnitude could often be found.

According to computations of the author the starting hypothesis according to which the "bigger" a country—considering the absolute value of the GDP—the better her foreign trade performance may be completed by the statement that the development level of a given country—on the basis of per capita GDP—is also in positive correlation with foreign trade performance.

In the following the author draws conclusions from the analysis mentioned above that refers to Austria. In his opinion the circumstance that intra-industry trade gained ever greater importance during the last three decades and thus size differences between countries participating in foreign trade more and more influence gains from foreign trade provides an explanation for the deteriorating trend of trade balance of such a small country like, for example, Austria, partly *independent* of oil price increases of 1973/74 and 1979/80. Though not querying the correctness of this hypothesis the reviewer thinks that if the

explanation for the deterioration of the trade balance of small countries can be divided into two parts, a factor connected with the oil price explosion and another one independent of it, then this latter may surely be further divided and out of these factors the disadvantages resulting from the size of the country will only be one, and perhaps not even the most important one. Problems of industrial structure, institutional system, economic policy, distortions arising from the inner functioning of the market mechanism and several other factors could be found among the explanatory factors independent of the oil price explosion.

The author draws one more conclusion from the results of his investigation. He thinks that in the interest of re-establishing competitiveness of industrially developed "small" countries in foreign trade the claim is justified that for countries in a disadvantageous situation owing to their size an increased protection of domestic markets should be allowed by GATT concerning imports with a simultaneous increase of export subsidization. However, he thinks that a practical realization of this idea is very difficult, because of difficulties in quantifying the disadvantages of "small" countries.

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